

Securing the Future

Retention Models in
Community Colleges

Study of Community College Structures
for Student Success (SCCSSS)



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Foreword

Ronald A. Williams

In many respects, Charles Dickens' timeless line "It was the best of times, it was the worst of times" applies to community colleges at the beginning of the second decade of the 21st century. Never have these institutions received so much acclaim for the work they have heroically done for over 100 years. They now enroll close to half the undergraduates in the country, and they are the largest sector of higher education. Between 2008 and 2011, enrollments grew at record rates, taking community college credit enrollment to more than 8 million students. The Obama administration has identified these institutions as the means by which the United States will retool its workforce so that the United States is once again the envy of the world with respect to the proportion of citizens with a degree. At the same time, because of the recession, community colleges have seen state budgets dramatically slashed, and they have had to turn away aspiring students in record numbers. And while President Obama has directed record funding toward the community college sector, this has come with much higher expectations and more scrutiny. As the criterion for excellence has moved from access to completion, the drumbeat of accountability has sounded powerfully and often.

It was against this backdrop that the College Board in 2010 commissioned the Project on Academic Success at Indiana University and the Center for Enrollment Research, Policy, and Practice at the University of Southern California to review the promising practices that community colleges have instituted to aid students in completing their degrees. The statistics with respect to completion at community colleges were well known, if often not well understood, so the report these two institutions were to create would not look at the rates but rather at the means by which community colleges were helping students to succeed. It was our hope that by highlighting these promising practices, we could help other community colleges in their search for higher completion rates or, more usefully, better student success. We also wanted to identify the extent to which these practices deemed by researchers and practitioners to be promising were, in fact, in use at community colleges across the nation. Finally, we wanted to distill these practices to a set of principles or criteria. These, we determined, should be placed in an inventory of sorts so that college presidents might review their institution's efforts through the prism of these distilled practices.

This report, *Securing the Future: Retention Models in Community Colleges*, is one of a series of research projects designed both to shine a spotlight on community colleges and to provide these institutions with additional tools with which they might respond to the extraordinary challenges they are facing. There is no presumption that community colleges have not been struggling with these issues for many years. As the research shows, many have found some success. It is this success that the following report highlights and disseminates. It is our hope that practitioners will see value in the findings and use them to advance the very important work that community colleges are doing.



Introduction: The National Context

The Study of Community College Structures for Student Success (SCCSSS) was launched in 2010 with three goals at its center:

1. To explore a set of promising institutional practices and organizational structures identified through theory and research as having the potential to support community college student success;
2. To present a synthesized overview, or matrix, of these promising practices and structures as a tool for community college leaders and practitioners; and
3. To collect national empirical data on the practices and structures that community colleges currently have in place to improve key student success outcomes, including student retention, successful transfer, and degree or certificate completion.

The SCCSSS investigation began with an exploration of the research and practice-oriented literature, augmented by findings from focus groups and interviews with community college leaders and practitioners. A survey, developed from the results of this initial exploration, was then conducted, with the participation of community colleges nationwide. This early phase of the study produced two of the project's central resources:

1. A matrix of promising institutional practices and organizational structures that can be used to facilitate campus discussions, professional development, and institutional planning; and
2. Results from a nationwide survey of community college leaders that provide an accurate, research-based view of how and to what extent the practices and structures in the matrix are currently in place at community colleges across the country.

In this report, we first discuss the national context for this work and review the key elements in the set of promising practices and organizational structures that were the foundation for the SCCSSS national survey. Next, we report the survey results to explore the extent to which community colleges have these practices and structures in place. Then, in the appendix, we present the matrix of promising institutional practices and organizational structures for community colleges, along with other key resources, to serve as a practical tool generated by the SCCSSS effort.

Across the nation, the call to increase community college student success and attainment — as demonstrated in rates of retention, successful transfer,

and degree or certificate completion — has never been more pressing. October 2010 witnessed the first-ever White House Summit on Community Colleges, with the intention of “beginning our national conversation to share the best practices to improve student outcomes at community colleges” (Biden, 2011). Although the national conversation at the summit, in broader policy discussions, and on community college campuses has centered on better student outcomes as a clear goal, the definitions of these outcomes and the identification of the practices and organizational supports needed to improve them are frequently debated in confused and contentious terms. As a result, the national rhetoric about the effectiveness of community colleges has not always reflected an accurate picture of community colleges and students, and the way forward for institutions has often been less than clear.

While the American Association of Community Colleges (Mullin, 2011) reported that credentials earned from community colleges in 2009–2010 represented a 127 percent increase over 1989–1990, a report from Complete College America (2011) featured in *The New York Times* (Lewin, 2011), painted quite a different picture. The report warned, for example, that of the 79 out of 100 postsecondary students in Texas enrolled in community colleges, only two of them would earn a two-year degree after two years, and only seven would do so after four years. Similarly, national outcomes data highlighted at the 2010 White House summit underscored that fewer than three in 10 full-time students pursuing two-year degrees met that goal within three years, that completion rates for part-time students were even lower, and that less than half of community college students intending to earn a degree or to transfer reached their goal within six years of first enrolling (White House, 2011). These findings certainly help to explain the national urgency to increase community college completion, but they also illustrate the complexity of community college student pathways and, perhaps even more important, the inconsistent and sometimes inappropriate application of student outcomes measures (Bailey, Leinbach, & Jenkins, 2005).

A growing number of researchers and advocates have been arguing that for higher education accountability measures to be appropriate for community colleges, these measures should (1) track students over longer timelines (i.e., using six-year graduation rates); (2) identify degree-seeking students using appropriately inclusive yet specific cohort definitions; (3) include student enrollments throughout the calendar year; and (4) take account of differences among colleges in

their students' pathways and institutional resources (Adelman, 2007; Bailey et al., 2005; Cook & Pullaro, 2010; Offenstien & Shulock, 2009). For example, research that took the mobility of students into account in measuring student persistence (Dundar et al., 2011) showed that full-time students enrolled in two-year public institutions in fall 2008 had a substantially higher rate of persistence (76 percent) than was shown in the retention rate following students' enrollment in a single institution only (66 percent). Consistent with these findings, experts have recommended that institutional data on student success be supplemented with information capturing students' enrollment in multiple institutions over time (Adelman, 2007; Offenstien & Shulock, 2009) and that multiple outcomes be tracked year to year and semester to semester, to capture students' changing circumstances and intentions over time (Bailey et al., 2005). Many of the student outcomes statistics attributed to community colleges, in particular the direst among them, do not apply these standards.

While the national debate about the effectiveness and accountability of community colleges has been intensifying, these institutions have been facing greater pressures on their capacity and on their multiple roles in the national education agenda. In spite of smaller high school cohorts and declines in state funding, community college enrollments have seen dramatic increases since the onset of the recent economic recession (Dundar et al., 2011). In fact, from fall 2007 to fall 2009, community college enrollment increased by nearly 17 percent, accounting for eight million of the country's credit-seeking college students in 2009 (Mullin & Phillippe, 2009) — a total that increases by five million when it includes students enrolled in noncredit classes at community colleges (Boggs, 2010). Overall, 40 percent of U.S. undergraduates today are enrolled at two-year institutions (Aud, Hussar, Johnson, Kena, Roth, Manning, Wang & Zhang, 2012), and in some states enrollments at community colleges actually outnumber those at four-year institutions.

Finally, community colleges are not only vital in the national agenda for college completion, they also are playing an increasingly central role in the educational attainment and life chances of individuals because college credentials are critical to success and resilience in the workforce. In fact, compared to jobs requiring no college experience, jobs requiring at least an associate degree are projected to grow twice as fast in the coming years (National Center for Public Policy and Higher Education, 2011). These circumstances are combining to place further strains on many community colleges' resources, even as they experience greater national scrutiny.

Within this high-pressure context, community colleges are seeking direction and insight into how to structure and nourish their efforts to improve student outcomes. Despite calls for research-based evidence on institutional practices and policies that improve community college student retention and completion, to date a national overview of the student success efforts of community colleges has been missing. Slowly, over time, evidence has been emerging about specific institutional practices and policies shown to improve community college student success (Moore, Shulock, & Offenstien, 2009; Scrivener & Weiss, 2009; Summers, 2003). In the meantime, while the research record is still accruing, many community college leaders and practitioners are looking to what similar institutions are doing in order to gain perspective and guidance in their efforts to shape and improve retention and completion outcomes for their students (Noel-Levitz, 2007). To address this need for information, the objective of this report is to offer clarifying empirical data about the practices and structures currently in place at community colleges, along with information about new research and practice-oriented resources. The report targets this objective by focusing on community college student success initiatives and how they are structured and defined in practice.

Promising Practices and Structures to Support Student Success

As mentioned above, after a thoroughgoing literature review — which drew on knowledge gained from other projects, including Achieving the Dream (a Lumina Foundation initiative) and the Community College Survey of Student Engagement (a Center for Community College Student Engagement initiative) — the SCCSSS project was able to construct a set of institutional practices and organizational structures that have the potential to support community college student success. This comprehensive set formed the framework for a new survey of community colleges aimed at understanding the prevalence and intensity of such practices and structures in American community colleges.

In addition to forming the framework for the SCCSSS national survey, the project's comprehensive set of institutional practices and organizational structures is the basis for the matrix of promising practices and structures, provided in the appendix. Because these practices and structures are themselves drawn from well-accepted theory and research on student progress, this matrix represents a step forward — one that we hope will not only be useful on campuses but will also be used to stimulate further research. An important

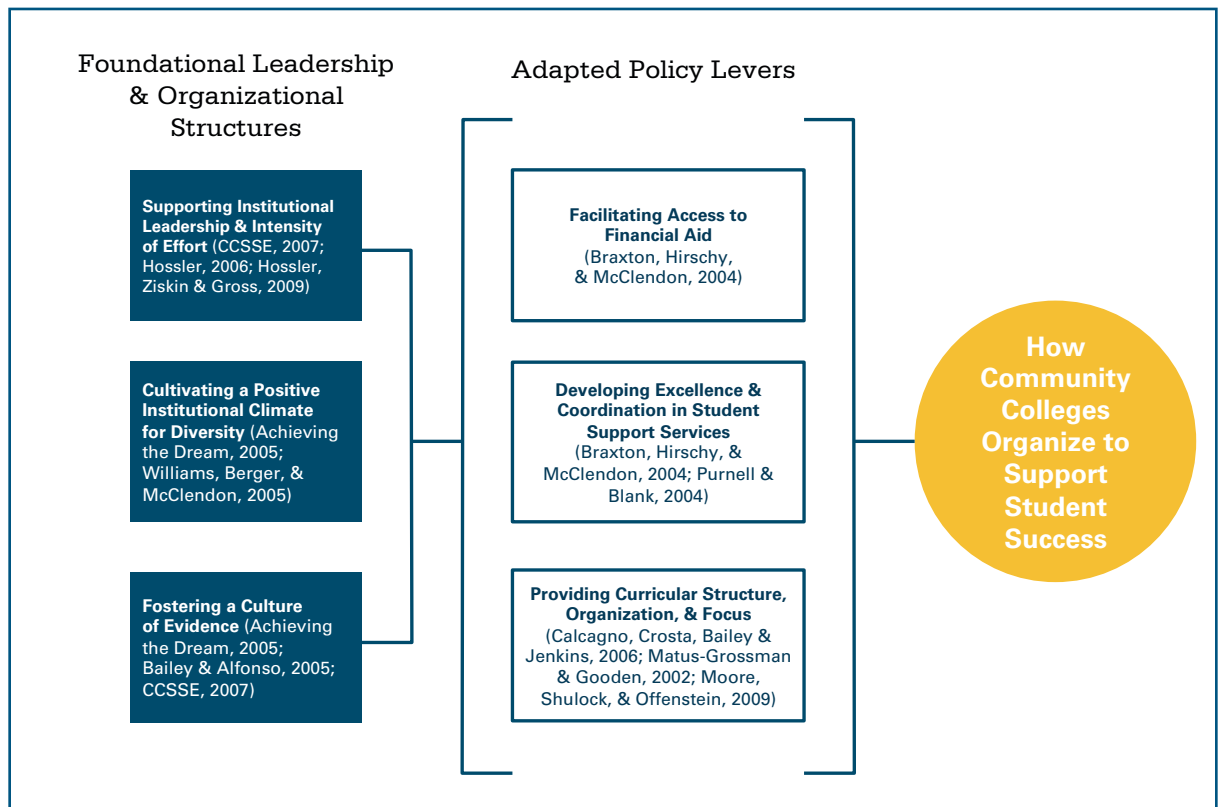
initiative community college leaders could take would be to use this matrix for an institutional self-assessment of the scope and intensity of campus efforts to promote student success. Researchers and practitioners alike could use the matrix to focus on specific practices and structures, and to evaluate their effectiveness.

Regarding our terminology in this report, a special note is in order. A practice is not “best” simply because it is accepted or prevalent. In fact, the research on student success has not yet identified which specific practices or sets of practices are “best practices.” Much more work needs to be done in the design and execution of studies that can provide empirical proof of the effectiveness of practices. Indeed, we see this as a productive next step and future direction for the SCCSSS team. Meanwhile, until we know more, even though “best practices” is a common term, we use what we believe is a more appropriate term for *practices holding promise* for colleges that seek to improve success outcomes, including students' retention, successful transfer, and program completion. Throughout this report, to refer to such practices we use the term “promising practices.”

Organizing for Student Success: The Community College Model

Accurately conceptualizing, or modeling, the practices and structures community colleges use to support student success was the SCCSSS team's first key goal. To accomplish this goal, we drew on multiple widely respected sources, including the national-scale efforts of Achieving the Dream and the Community College Survey of Student Engagement (CCSSE), and we adapted the widely recognized policy levers of Braxton, Hirschy, and McClendon (2004) to fit the institutional roles and conditions informing community college practice and policy. In addition, to help us situate the elements of the model within current and emerging contexts for institutional practice and policy, we conducted focus groups and interviews with community college leaders from across the country. The conceptual model (illustrated in the figure below) and the accompanying narrative resulted from this synthesis and review.

In its broadest dimension, our conceptual model encompasses two sets of constructs: Foundational Structures and Adapted Policy Levers. The first of these sets, Foundational Structures, includes three constructs: (1) Supporting Institutional Leadership and Intensity of Effort; (2) Cultivating a Positive Institutional Climate for Diversity; and (3) Fostering a Culture of Evidence. The second set of constructs, Adapted Policy Levers, includes three constructs, all of which are associated with activities that work directly and in tandem with one another to support student success: (1) Facilitating Access to Financial Aid; (2) Developing Excellence and Coordination in Student Support Services; and (3) Providing Curricular Structure, Organization, and Focus (Achieving the Dream, 2005; Braxton et al., 2004; Community College Survey of Student Engagement [CCSSE], 2007).



I. Foundational Leadership and Organizational Structures

The first of the two complementary sets of constructs built into this exploration, Foundational Leadership and Organizational Structures, includes the policies and structures that derive from the institution's mission and leadership focus. The three constructs within this set are interdependent.

Supporting Institutional Leadership and Intensity of Effort

Institutional leadership is key in community colleges' efforts to improve student success. This makes intuitive sense, of course, but the literature bears this out as well, showing that the resources, structures, and leadership dedicated to improving student outcomes are important in an institution's foundation for student success (Hossler, 2006). Studies have noted as well that the quality of implementation, or the intensity of institutional effort, also makes a critical difference in the effectiveness of student success programs (Hossler, Ziskin, & Gross, 2009). For these reasons, questions focusing on institutional leadership and institutional intensity of effort are a central component of the

SCCSSS survey. Organizational structures identified for this component include designating an individual and establishing committees to oversee retention and diversity efforts, giving authority to the retention coordinator, having a written plan, coordinating across efforts, working toward being a learner-centered institution, facilitating transformational institutional change, and promoting faculty development (Boswell & Wilson, 2004; CCSSE, 2007; Habley & McClanahan, 2004; Hossler, 2006; Hossler et al., 2009; Jenkins et al., 2006; McArthur, 2005; McClenney & McClenney, 2010; McClenney, McClenney, & Peterson, 2007; Noel-Levitz, 2007; Ziskin, Hossler, & Kim, 2009).

Cultivating a Positive Institutional Climate for Diversity

To cultivate a positive and nondiscriminatory environment on campus, and thereby to facilitate academic success and equity for all students, community colleges have practices and structures that are explicitly engaged with and responsive to student diversity; that support faculty, administrators, and

staff in developing the consciousness, experience, and skills for a positive climate for racial/ethnic and cultural diversity on campus; and that engage diversity in campus efforts toward student and organizational learning (Matus-Grossman, Gooden, Wavelet, Diaz, & Seupersad, 2002; Williams, Berger, & McClendon, 2005). Other specific practices to cultivate and support a positive institutional climate for diversity include developing a formal plan to assess and support racial/ethnic and cultural diversity on campus, designating an individual or committee to assess diversity initiatives, clarifying antidiscrimination policies and practices, and providing faculty development opportunities focused on racial/ethnic and cultural diversity on campus.

Fostering a Culture of Evidence

Fostering a culture of evidence at an institution means developing and implementing collegewide improvement strategies and practices that are based on empirical research and data (Bailey & Alfonso,

2005; Boswell & Wilson, 2004; CCSSE, 2007; Jenkins et al., 2006; Jenkins, Ellwein, Wachen, Kerrigan, & Cho, 2009). The exemplary goals of *Achieving the Dream* (2005) stipulate that participating colleges will drive policy and decision making with evidence, using data to identify problems, set goals, establish priorities, allocate resources, and measure progress. Fostering a culture of evidence implies that colleges will have systems, policies, and procedures for program review, strategic planning, and budgeting that are guided by evidence of what works to promote student success. This also means that colleges will use evidence to foster systemic improvements in the college's academic programs and student services (Jenkins et al., 2006), e.g., focusing on retention and other success outcomes, exploring ways to improve student success, regularly and systematically reviewing each program's performance, assessing the success of students in gateway courses, and continually documenting and assessing learning.

II. Adapted Policy Levers

The second complementary set of constructs in how community colleges organize to support student success, Adapted Policy Levers, includes the activities and measures that institutions implement in efforts to assure student success. While this set has three constructs within it, this should not imply that each works independently of the others or that the set is exclusive. Rather, these constructs encompass a broad range of issues that have been linked to community college student success.

Facilitating Access to Financial Aid

Many community colleges do not have the resources to provide institutional aid. Our conceptual model of the practices and structures community colleges use to support student success, therefore, builds upon and adapts Braxton, Hirschy, and McClendon's (2004) recommendation that institutions provide need-based aid to include the many ways community colleges make various types of aid available to students. These efforts include providing tuition reimbursements, communicating information about aid to students, providing financial aid counseling, broadening the definition of student expenses when considering college costs (e.g., direct and indirect costs; opportunity costs), and leveraging fee structures and credit loads to support students and to encourage full-time enrollment (Calcagno, Crosta, Bailey, & Jenkins, 2006; Matus-Grossman et al., 2002; Moore et al., 2009).

Developing Excellence and Coordination in Student Support Services

This construct includes the provision of the following student support services: academic guidance and counseling; academic support, personal guidance, and counseling; career counseling; and logistical support such as child care and transportation (Gardenhire-Crooks, Collado, & Ray, 2006; Jenkins et al., 2006; Matus-Grossman et al., 2002; Moore et al., 2009; Purnell & Blank, 2004). As summarized by Purnell and Blank (2004), student support services should (1) be as comprehensive as possible; (2) afford students regular contact with a consistent counselor to develop and monitor the student's education plan; (3) guide students to develop achievable and realistic career goals and make suitable adjustments to attain these goals; (4) bring together various support services into a unified intervention; and (5) alleviate student financial hardships by providing, among other things, book vouchers, child care, and transportation assistance.

Providing Curricular Structure, Organization, and Focus

This final construct concerns the ways institutions tailor educational and other academic services to meet the individual needs of students through the institutions' purposeful efforts to understand their students' needs and to subsequently tailor course offerings, class schedules, and course structures and formats to meet

them (Calcagno et al., 2006; Gardenhire-Crooks et al., 2006; Matus-Grossman et al., 2002). This construct also includes the pedagogical approaches used by faculty, various applied and active learning strategies (Braxton et al., 2004), instructional approaches connecting course objectives and classroom learning

activities with real-world issues, and learner-centered in-class activities (CCSSE, 2007). Other activities and measures within this construct include creating linked courses, using learning communities, providing practicum opportunities, and providing co-op learning opportunities.

Survey Results

The results presented in this report highlight the institutional practices and organizational structures in place to support student success at community colleges across the nation. These findings can be useful to campus policymakers as they evaluate efforts on their own campuses to foster dialogue about, explore questions on, and provide support services for student success.

Throughout the report, findings are examined in light of various institutional characteristics. To underscore colleges' reported emphases and approaches in light of challenges that accompany different levels of enrollment, selected survey responses are broken out by institution size.¹ Additionally, to highlight efforts by institutions with different levels of financial resources, the report considers total institutional revenue per FTE student² — a measure of institutional wealth determined by the amount of total revenue earned overall per full-time equivalent (FTE) student enrolled. As noted by Wellman and associates (2009), total revenues are an important factor in shaping the functions and capacities of higher education institutions. Considering study findings within the context of colleges' total revenue per student, therefore, helps to clarify the meaning of institutions' investments toward student success efforts.

Derived from research on the role of community colleges in supporting student success (e.g., Braxton et al., 2004; Calcagno et al., 2006; Moore et al., 2009; Purnell & Blank, 2004), the questions addressed in this survey focused on structures within 10 topic areas commonly found to support student retention and success at community colleges: (1) coordination of student success efforts, (2) assessment and reporting,

(3) climate for diversity, (4) financial aid, (5) student orientation, (6) academic advising, (7) early warning and academic support, (8) developmental education, (9) student support, and (10) curriculum. Our findings are presented below for each of these 10 areas of interest.

Coordination of Student Success Efforts

Survey questions on this topic sought to understand the extent to which institutions had established policies and structures to support student success and aspirations. Collegewide committees offer one structure through which institutions monitor and evaluate institutional efforts to promote student success. In SCCSSS survey results, a majority of responding institutions (69.2 percent) reported having collegewide committees that meet regularly to improve student retention. However, fewer institutions (51.5 percent) said they had established collegewide committees to improve degree or certificate completion, and still fewer institutions (37.6 percent) reported having collegewide committees to improve transfer rates to four-year institutions.

While dedicated and empowered committees are used to support student success efforts at many community colleges (Jenkins et al., 2006; Noel-Levitz, 2007), other colleges charge one or more specific individuals with coordinating efforts across the institution (Habley & McClanahan, 2004; Hossler, 2006). The majority of responding institutions reported having a retention coordinator with one or both of the following roles: (1) coordinating efforts to improve student retention rates or (2) acting as a central resource for those efforts. The retention coordinator carried out both of these roles at most of the institutions that reported having a retention coordinator (85 percent), as shown in Figure 1.

Looking more closely at results broken out by level of total revenue, we found that colleges reported having a retention coordinator in similar proportions across all levels of total revenue per FTE. Figure 2 shows that 66.2 percent of low-revenue institutions reported having a designated administrator in this role, while only slightly greater percentages of institutions in the middle- (66.7 percent) and high-revenue (70.1 percent) levels reported having a retention coordinator.

1. Institution size based on the number of FTE (12-month full-time equivalent enrollment: 2008–2009); small: 1,999 or less (36.4 percent of the population, or 24.6 percent of the sample); midsize: 2,000–4,499 (30.7 percent, or 36.9 percent); large: 4,500 or above (33.0 percent, 38.6 percent).

2. Total revenue per FTE (total revenue and other additions/ 12-month, full-time equivalent enrollment: 2008–2009); low: \$10,499 or less (33.5 percent of the population, or 33.8 percent of the sample); middle: \$10,500–\$12,999 (31.6 percent, or 32.0 percent); high: \$13,000 or above (34.9 percent, or 34.2 percent).

Figure 1. Retention Coordinator Roles at Responding Institutions That Reported Having a Retention Coordinator

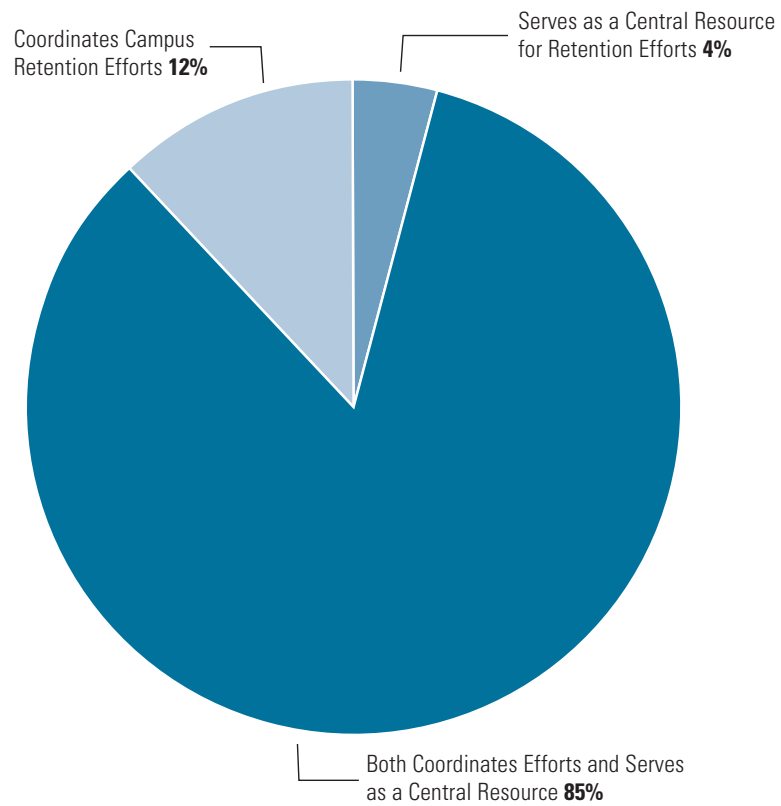


Figure 2. Presence of Retention Coordinator, Displayed by Level of Total Revenue

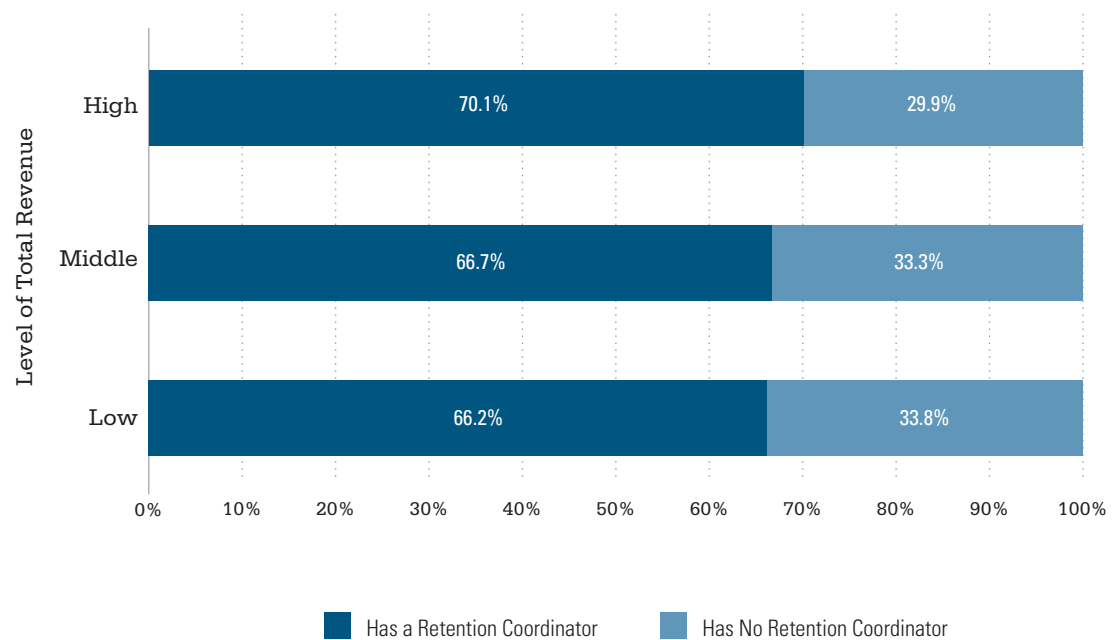
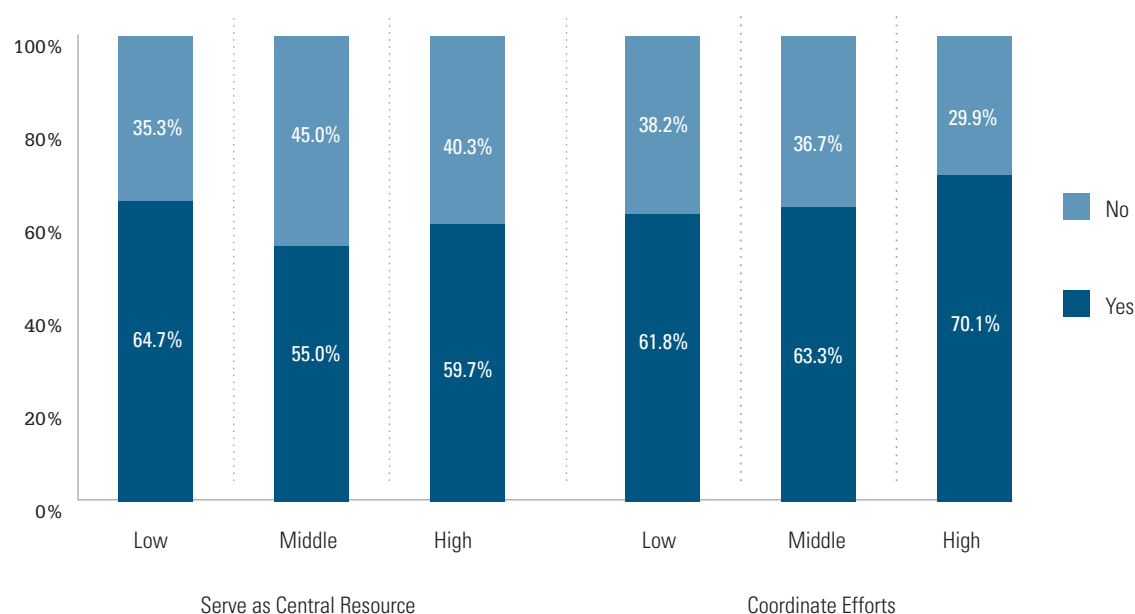


Figure 3. Retention Coordinator Responsibilities, Displayed by Level of Total Revenue



The responsibilities assigned to retention coordinators, moreover, were fairly similar across the total revenue levels, as shown in Figure 3. Among institutions whose retention coordinator reportedly served as a central resource for retention efforts, there was a slightly larger proportion of low-revenue colleges (64.7 percent) compared to colleges in the middle- (55.0 percent) and high-revenue (59.7 percent) levels. Among institutions reporting that they had a key individual charged with coordinating student retention efforts, there was a greater percentage of institutions with high revenues (70.1 percent) compared to institutions in the middle- (63.3 percent) and low-revenue (61.8 percent) levels.

Despite the prevalence of retention coordinators — at 68 percent of the responding colleges — the amount of authority actually afforded to the coordinators varied across campuses. Overall, retention coordinators were given more authority to *implement* new initiatives than to *fund* them.

Retention coordinators were reported to have either some or a great deal of authority to implement new initiatives at a majority of responding institutions (64.9 percent). Conversely, retention coordinators were reported to have *little* to *no* authority to *fund* new initiatives at a majority of institutions (64.6 percent) and a *great deal* of funding authority at only 2.7 percent of institutions. Thus, although retention coordinators were reported to have flexibility to implement new initiatives without approval from other administrators or governing bodies on campus, that authority was limited when it came to funding those initiatives.

Additionally, although a majority of the institutions reported having a retention coordinator, on average, these institutions had one full-time equivalent (FTE) position or less designated to coordinate retention efforts. It is interesting to note that while institutions with middle or high revenues had, on average, less than one FTE position dedicated to the retention coordinator role (0.8 FTE), institutions with low revenue had, on average, more than one FTE position dedicated to the role (1.8 FTE).

Across departments and divisions, efforts to support student retention often exist in multiple forms in different areas of campus. Often, however, institution-wide student success necessitates the coordination of these efforts (CCSSE, 2007; Jenkins et al., 2006; Jenkins et al., 2009; McClenney & McClenney, 2010). Overall, only 2.8 percent of institutions reported that they did not coordinate any efforts for student success at all. Nevertheless, only about a fifth (19.7 percent) of institutions reported that the efforts at their institution were coordinated to a great extent.

Larger institutions were more likely to coordinate student success efforts compared to smaller institutions, as presented in Figure 4. Student success efforts were reported to be coordinated to a great extent at a quarter of large institutions (25.0 percent) and at a lesser proportion of small institutions (16.7 percent). In contrast, student success efforts were reported as not being coordinated at all at only 1.6 percent of large institutions and at a slightly higher proportion of small institutions (4.2 percent).

Figure 4. Extent of Coordination of Student Success Efforts, Displayed by Institution Size

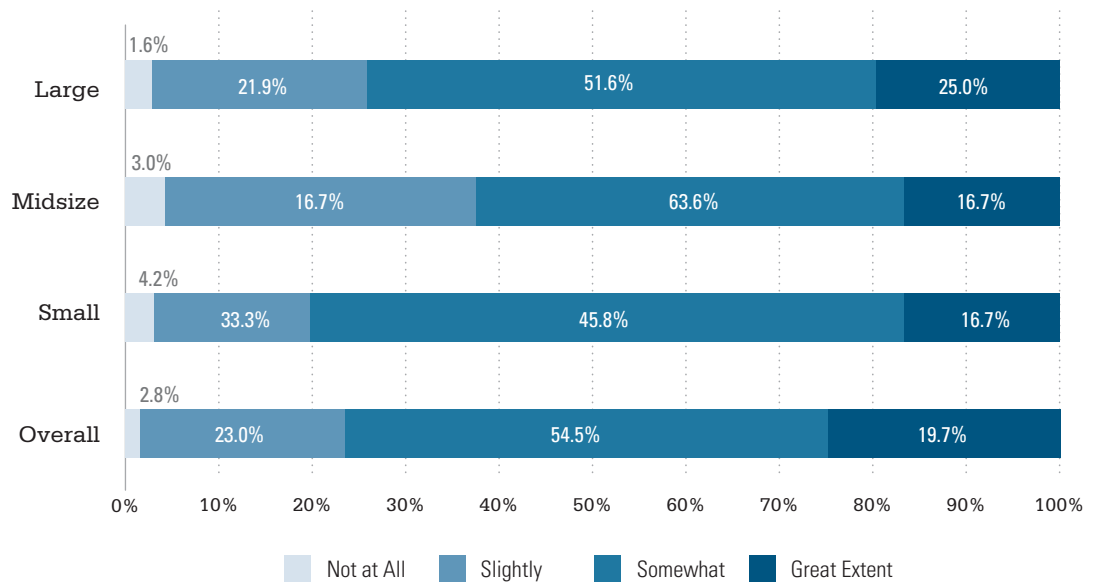


Figure 5. Level of Involvement by Different Members of the College Community in Planning for Student Retention Efforts

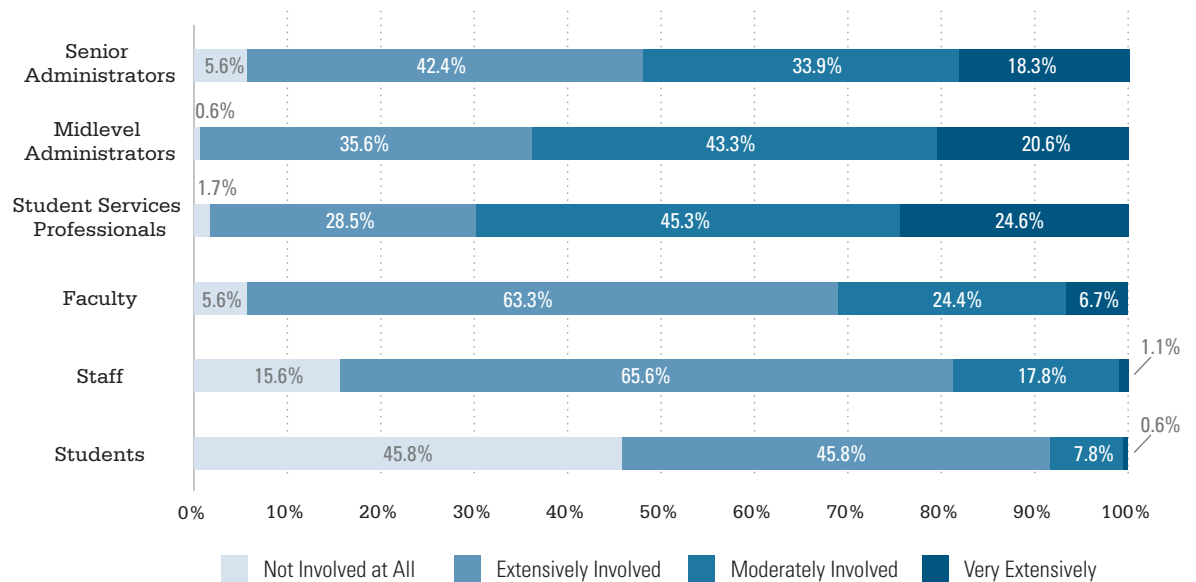
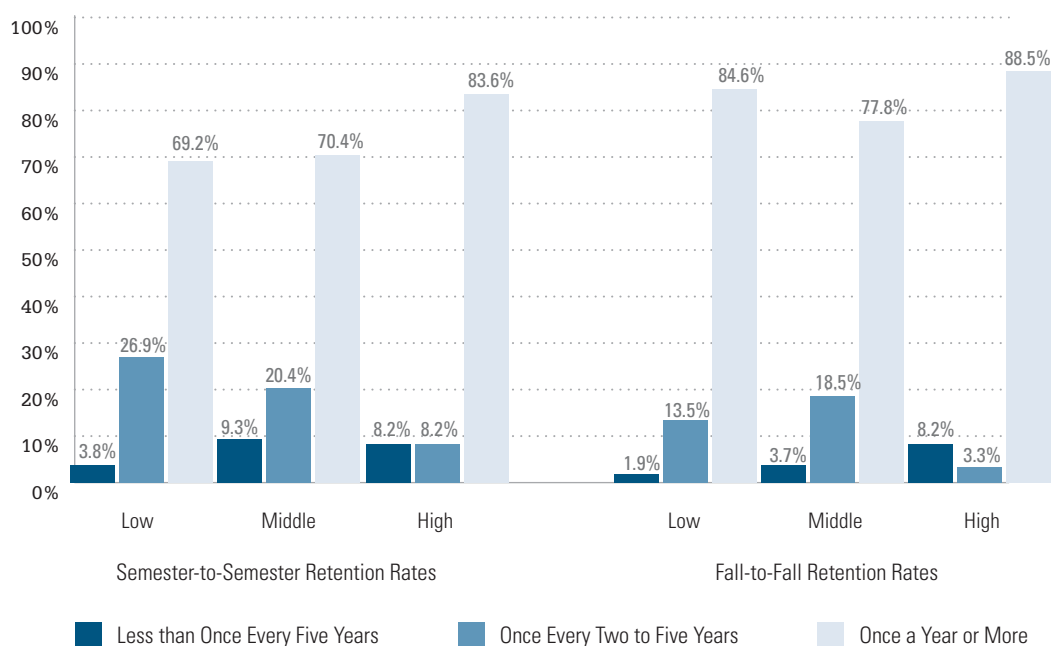


Figure 6. Analysis of Data by Student Retention Outcomes, Displayed by Level of Total Revenue



Collaborative planning for student retention efforts involves the work of many units, leaders, and practitioners across campus. In the survey we asked respondents to rate the involvement of stakeholders in the following categories: senior administrators, midlevel administrators, student services professionals, faculty, staff, and students. Perhaps not surprisingly, among the many campus stakeholders who contribute to student success, student services professionals were most often reported as highly involved in institutions' student success efforts (see Figure 5). Student service professionals were reported to be extensively involved in campus student success efforts at almost 70 percent of responding community colleges. Extensive involvement by midlevel administrators was reported by 63.9 percent of responding institutions and by senior administrators at just over half of responding institutions (52.2 percent).

Although faculty were not reported to be the main actors in planning student retention efforts (only slightly more than 30 percent of colleges said faculty were extensively or very extensively involved in this area), faculty were reportedly involved to some extent at almost all (94.4 percent) responding institutions. Staff members were less involved than were faculty, with 15.6 percent of institutions reporting that staff were not involved at all in planning student retention efforts. Institutions tended not to involve students in planning for student retention efforts; students were not involved at all in such planning at just under half of responding institutions (45.8 percent) and were

involved only moderately at the same proportion of institutions (45.8 percent).

This context of coordinating around student success efforts is important when considering the next question posed to institutions, which focused on their perceptions of how difficult or easy it is to communicate across their campuses about institutional effectiveness. Communication across units and departments is a particularly important factor in promoting campus efforts for student success (Jenkins et al., 2009). However, communication about institutional effectiveness appears to be difficult for many colleges. Regardless of institution size, the perceived difficulty or ease in communicating about institutional effectiveness across divisions remained evenly split among responding institutions, with about half reporting ease and half reporting difficulty. Communication was relatively more difficult, however, in the case of midsize community colleges, of which slightly more than half of respondents (54 percent) reported communication difficulty.

Assessment and Reporting

A culture of evidence across a community college campus is a critical piece of the student success puzzle (Bailey & Alfonso, 2005; Boswell & Wilson, 2004; Habley & McClanahan, 2004; McClenney & McClenney, 2010; McClenney et al., 2007). Our survey asked a number of questions to assess the extent to which structures were in place at community colleges

across the nation for using data to understand student performance along measures of persistence, transfer, and completion — and for informing colleges' decisions about their efforts to improve student success. The findings below center on questions regarding the use of data analysis and reporting across campus offices.

In general, these findings show that community colleges across the nation are putting forth effort to create a culture of evidence on their campuses. Data were reportedly used to support assertions about what works in campus discussions on promoting student success at least to some extent at almost all responding institutions (97.5 percent) and to a great extent at more than half of responding institutions (52.5 percent).

Another component instrumental to student success efforts is the presence of institutional researchers who have the expertise required for conducting these analyses, as well as the assigned task of doing so. In exploring the availability of these resources broken out by institution size, we found, not surprisingly, that large institutions had a greater number of employees dedicated to institutional research on their campuses. Large institutions reported employing an average of 2.5 FTE institutional research professionals in 2009–2010, whereas midsize and small institutions reported employing an average of 1.1 and 0.7 FTE institutional research professionals, respectively.

A substantial majority of institutions in all total revenue levels, as shown in Figures 6 and 7, reported analyzing student outcomes — retention rates, transfer rates, and

degree or certificate completion rates — once a year or more. Figure 6 shows that retention rates — both semester-to-semester and fall-to-fall — were analyzed at least once a year or more by the majority of institutions. Notably, institutions with a high level of total revenue were more likely to analyze retention outcomes more frequently than low- or middle-level colleges.

Figure 7 presents findings on analysis of transfer and completion rates. Completion rates were analyzed more frequently than transfer rates. Interestingly, transfer rates were reportedly analyzed annually at a greater proportion of low-revenue institutions than at institutions in other revenue levels. Similar to the results presented in Figure 6, completion rates were analyzed more frequently at high-revenue colleges compared to middle- and low-revenue colleges.

Institutions' analysis of student outcomes in developmental education courses reflected similar patterns. Completion rates for students enrolled in developmental education courses were reportedly analyzed at least once every five years at nearly all responding colleges (94.6 percent) and once a year or more at 78.9 percent of responding institutions.

Other student outcomes, such as retention and transfer rates, were the focus of analysis less frequently, however. For instance, a small but notable proportion of colleges (10 to 12 percent) reported either that they had never analyzed retention or subsequent college-level course completion outcomes for students in developmental courses, or that they had analyzed performance along these measures less often than

Figure 7. Analysis of Data by Student Transfer/Completion Outcomes, Displayed by Level of Total Revenue

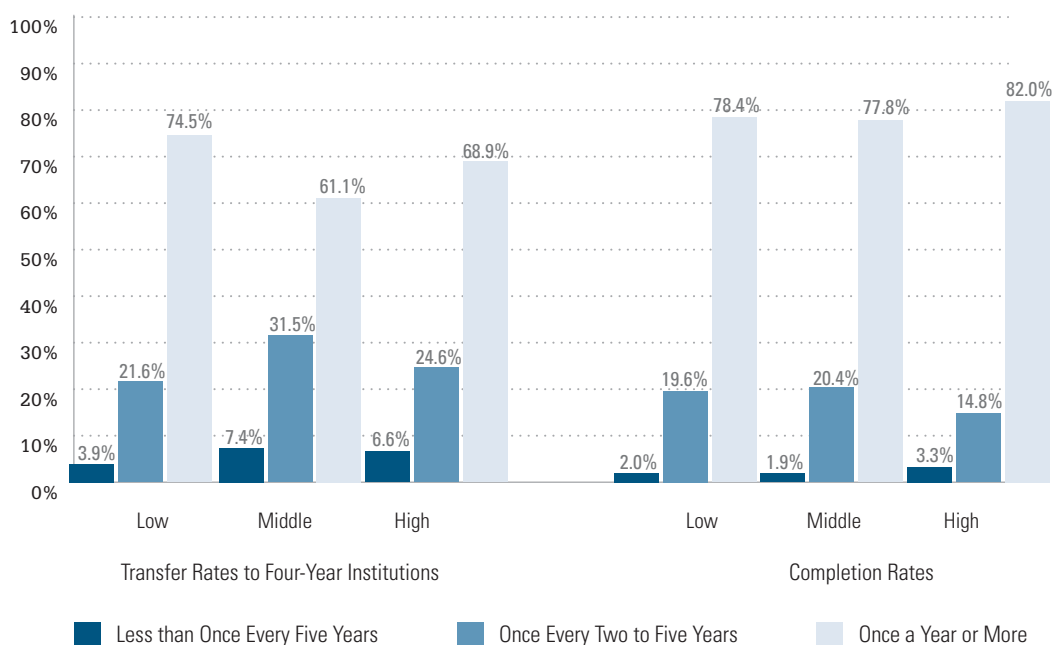
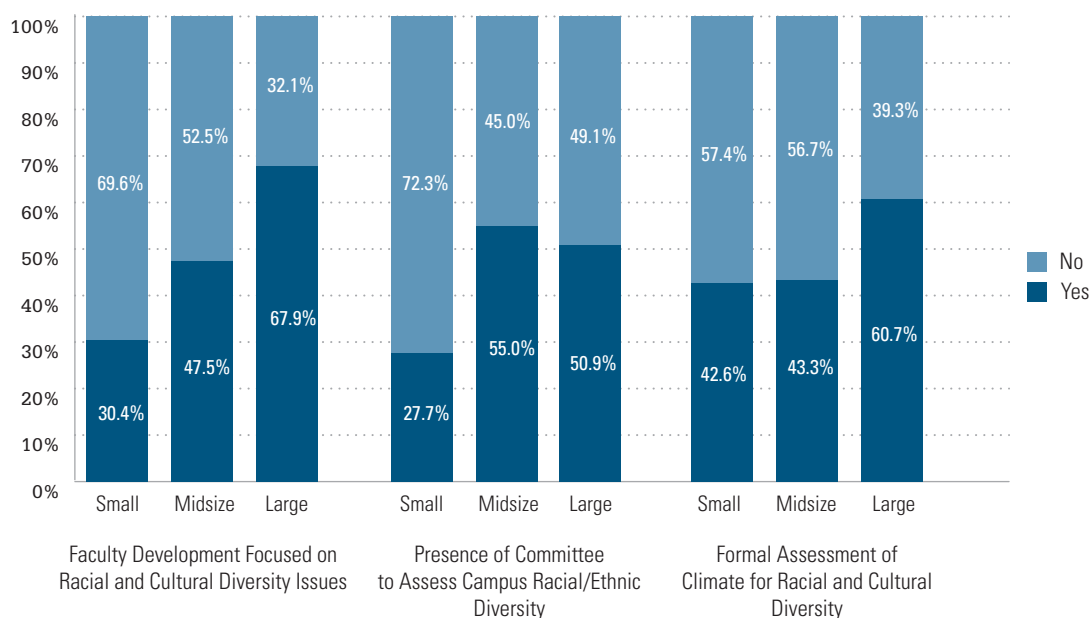


Figure 8. Practices for Cultural and Racial Diversity, Displayed by Institution Size



once every five years. Also, more than 20 percent of institutions reported that they had analyzed transfer rates and degree or certificate completion rates specifically for these students either never or less than once every five years.

Nevertheless, excluding transfer rates, outcomes for students enrolled in developmental education courses were conducted once a year or more by more than half of the responding institutions. The specific student outcomes that a majority of institutions analyzed at least annually included retention, degree or certificate completion, and subsequent college-level course completion rates for students enrolled in developmental education courses.

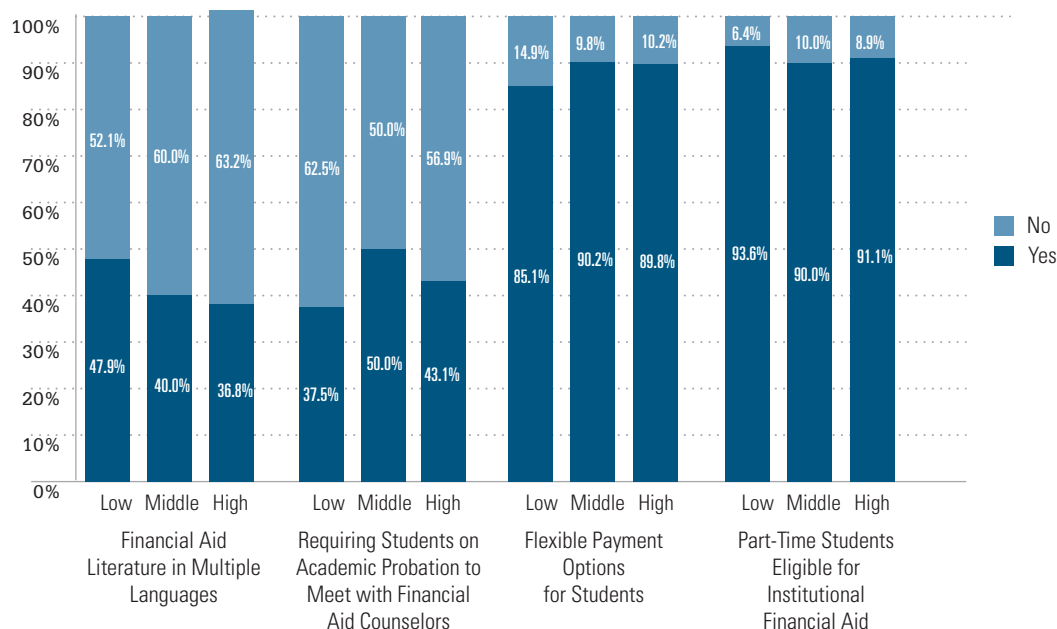
Some of the emphasis on reporting student outcomes at these institutions may be related to the efforts of authorities within the institution. A governing board required annual reports on student success outcomes at more than half of the responding institutions (60 percent), and the same percentage reported that their administration had initiated campus discussions on each measure of student success at least several times or more during the past year. This emphasis on reporting student outcomes, however, differed across these institutions by specific outcomes. While more than 80 percent of institutions reported that discussions had been initiated on their campuses several times or more last year on retention (83.4 percent) and completion (82.9 percent), fewer institutions reported frequent discussions on transfer

rates (62.8 percent). Furthermore, administrators reportedly either never or rarely initiated campus conversations on transfer rates at 37.7 percent of responding colleges, compared to campus conversations on retention rates (16.6 percent) and degree/certificate completion rates (17 percent).

Structures Supporting a Positive Climate for Diversity

Compared to other institution types, community colleges enroll larger proportions of students of color and employ a significant number of faculty of color. Institutional structures to promote racial and ethnic diversity, therefore, are particularly essential to the success of students at community colleges. The survey results presented in Figure 8 suggest that structures to support a positive climate for diversity are more prevalent at large community colleges compared to midsize and small colleges. Among the large institutions responding to our survey, 60.7 percent had conducted a formal assessment of institutional climate for racial and cultural diversity within the last 10 years, 50.9 percent had a committee to assess campus diversity, and 67.9 percent provided faculty development focusing on diversity issues.

A smaller proportion of small institutions reported having similar structures in place. In particular, only 27.7 percent of responding small institutions had a committee charged with assessing the campus climate for racial/ethnic and cultural diversity, and just 30.4

Figure 9. Support for Financial Aid, Displayed by Level of Total Revenue

percent offered faculty development opportunities focusing on diversity. While small and midsize institutions were generally more homogeneous and predominantly white, larger institutions on average had greater diversity in their student enrollments. However, these findings may reflect a larger issue regarding how community colleges assess and address issues of campus diversity.

Overall, respondents reported that their institutions' hiring practices included efforts to reflect the racial and ethnic diversity of the student body at less than half of all responding institutions (44.5 percent). However, these efforts were reportedly made to a great extent at only 20 percent of the institutions, and not at all at 14 percent of them. The study collected data on racial/ethnic diversity among students and faculty, and on these perceptions of hiring practices. This type of information relates to the range and depth of community colleges' perceptions and practices related to structural diversity on campus.

Financial Aid

Financial aid is an essential support for the success of community college students, particularly those from low-income backgrounds who may need extra help navigating the higher education system and paying for college. Some community colleges may provide student aid in some form, but more commonly the role of the institution in this context is to provide access to information about student aid from federal and state

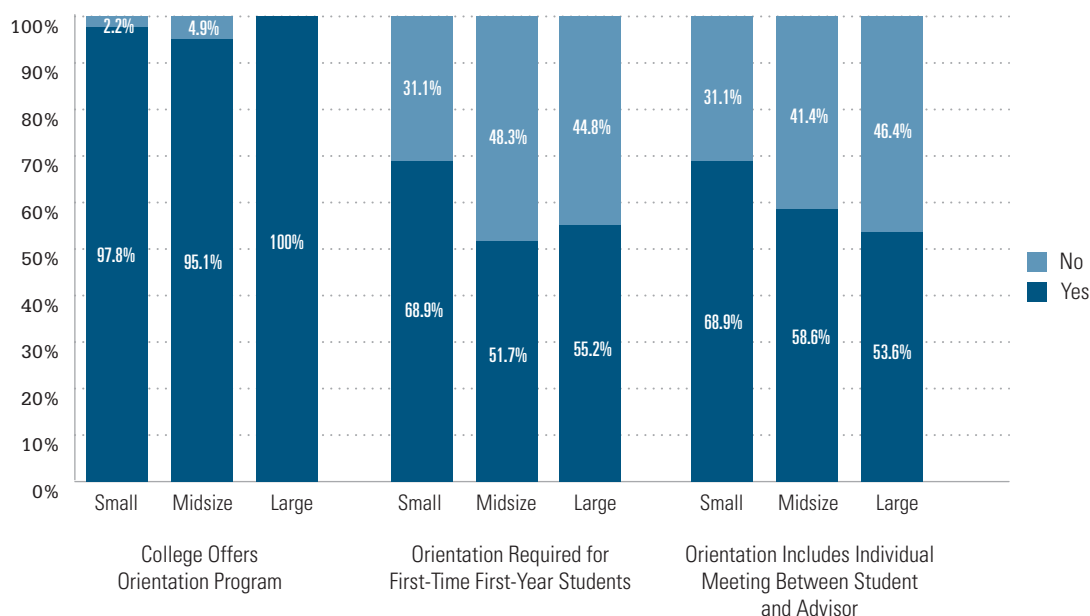
programs. This is particularly important for students taking more complex pathways for their higher education — pathways that often include part-time enrollment, work, and family obligations. Support also comes from counselors who guide and advise students, particularly those who may be academically at-risk (Brock & LeBlanc, 2005; Matus-Grossman & Gooden, 2002).

Figure 9 illustrates the prevalence by level of total revenue of certain institutional structures providing support for financial aid. At each level of total revenue — low, middle, and high — community colleges responding to the survey reported relatively similar financial aid practices.

Large proportions of part-time students were reportedly eligible for financial aid at institutions responding to the survey, ranging from 90.0 percent to 93.6 percent of campuses across all total revenue levels. Similarly, flexible payment options were reported to be widely available for students at 85.1 percent to 90.2 percent of campuses.

Only two financial aid practices were employed notably differently by campuses that had different total revenue levels. First, students on academic probation were required to meet with financial aid counselors to a greater extent at middle-revenue institutions (50.0 percent) than they were at low- or high-revenue institutions (37.5 percent and 43.1 percent, respectively). Second, the availability of financial aid literature in multiple languages was reportedly somewhat greater at low-revenue institutions (47.9

Figure 10. Orientation Offerings, Displayed by Institution Size



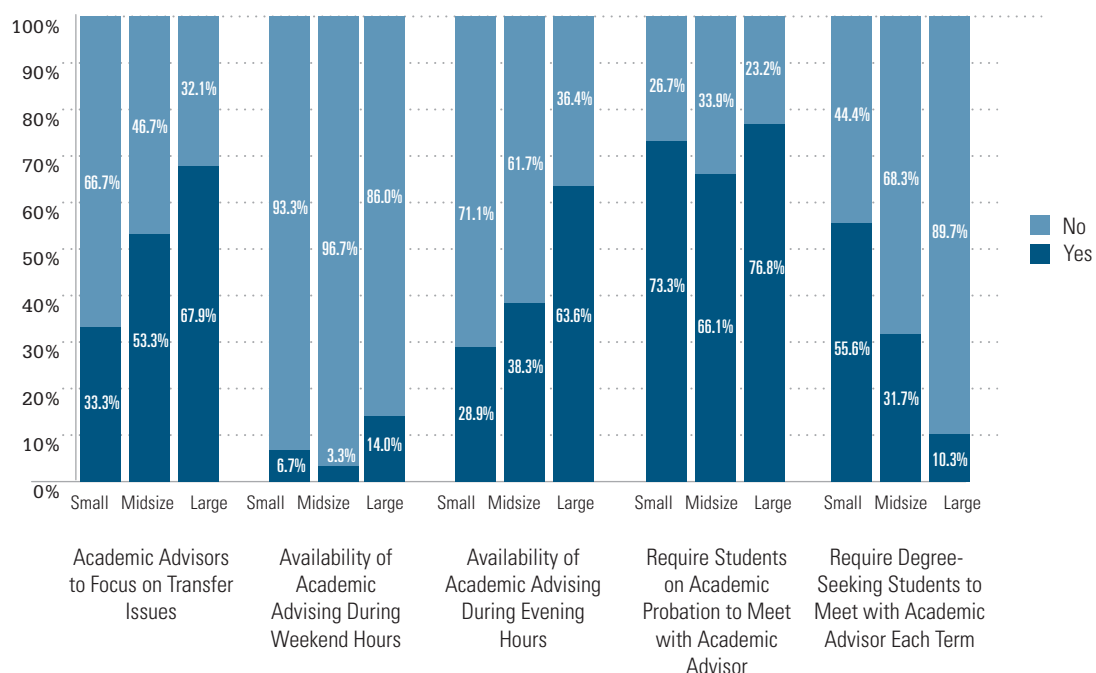
percent) than at middle- and high-revenue institutions (40 percent and 36.8 percent, respectively). It should be noted that 16 percent of the low-revenue colleges had a Latino enrollment of 25 percent or more of the student body and could be considered Hispanic-enrolling institutions (Malcom, Bensimon, & Dávila, 2010). A comparable percentage of the high-revenue colleges (15.0 percent) were Hispanic-enrolling, but as mentioned above, the high-revenue institutions showed the lowest rate of offering financial aid literature in multiple languages. In contrast, 6.0 percent of responding colleges in the middle-revenue category were Hispanic-enrolling institutions. Regardless of these specific enrollment patterns, having financial aid literature available in multiple languages is an important strategy for providing support to multiple non-English-speaking communities as increasing numbers of diverse and language minority students seek higher education opportunities at community colleges.

Because much of the work of supporting students through financing their college education falls on the shoulders of financial aid counselors, it is important to note the extent to which institutions invest in the individuals who carry out the work at campus financial aid offices. Results on the presence on campus of financial aid counselors (by FTE) by institution size revealed a pattern that seems to make intuitive sense: Large institutions reported having the most FTE financial aid counselors (an average of 8.4 per institution), followed by midsize institutions (3.6), and, finally, small institutions (2.4). Nevertheless, when these resources

are put in context with FTE student enrollment numbers, it can be observed that the additional resources provided at large colleges are not necessarily in proportion to the greater student enrollment. When taking institution size into account, the ratio of FTE students to FTE financial aid counselors was 539:1 for small colleges, 1,000:1 for midsize colleges, and 1,738:1 for large colleges. Thus, although responding institutions had more FTE financial aid counselors on average the more students they enrolled, the student-counselor ratios were smallest and most favorable at the small colleges. The availability of financial aid counselors to students is imperative in community college settings, where students may need extra support in navigating financial aid structures and policies.

Student Orientation

Orientation programs help students make the transition to college and introduce them to the opportunities and support services available to them (Overland & Rentz, 2004). Overall, as seen in Figure 10, the vast majority of responding community colleges reported offering orientation programming. All large institutions (100 percent) and almost all midsize and small institutions (95.1 percent and 97.8 percent, respectively) reported offering orientation programs. Furthermore, regardless of size, more than half of all institutions reported (1) requiring orientation for first-time first-year students and (2) including individual meetings between students and their advisors in these programs.

Figure 11. Academic Advising Structures, Displayed by Institution Size

Although attending orientation was widely required at the responding institutions, orientation programs at only 10.2 percent of institutions were reported to be longer than one day; at 72.7 percent of institutions, such programs were half a day (four hours) or less.

Academic Advising

Academic advising is another essential support for the success of community college students — many of whom are first generation in college and may need guidance in adapting to the academic demands of higher education. At the community colleges responding to our survey, as shown in Figure 11, degree-seeking students were required to meet with an academic advisor each term at a larger proportion of small institutions (55.6 percent) than midsize (31.7 percent) or large (10.3 percent) institutions — a contrast that could be attributable to differences across these institutions' sizes and the numbers of students needing support services.

Students on academic probation were required to meet with an academic advisor at over 70 percent of large and small community colleges. Academic advising was reportedly available to students at large institutions during evenings (63.6 percent) and on weekends (14.0 percent) at higher percentages than those reported by small institutions. The presence of academic advisors focused specifically on transfer issues was also reported by a majority of large institutions (67.9 percent), compared to only 33.3 percent of small institutions.

Early Warning and Academic Support

Midterm grades and other early-warning practices have been used by institutions to identify students who may be struggling, so as to intervene and direct these students to the appropriate available academic support services. Early-warning mechanisms were in place at many of the community colleges responding to our survey. Specifically, mechanisms were in place to collect midterm information (at 51.6 percent of these institutions), to contact students with low midterm grades in one or more courses (58.1 percent), and to contact students who missed classes in the first three weeks of the term (59.0 percent). However, 30.0 percent of institutions indicated that they were not implementing these mechanisms, indicating a need for some institutions to evaluate their approach to monitoring and supporting student progress at early stages.

Figure 12. Presence of Supplemental Instruction Services, Displayed by Level of Total Revenue

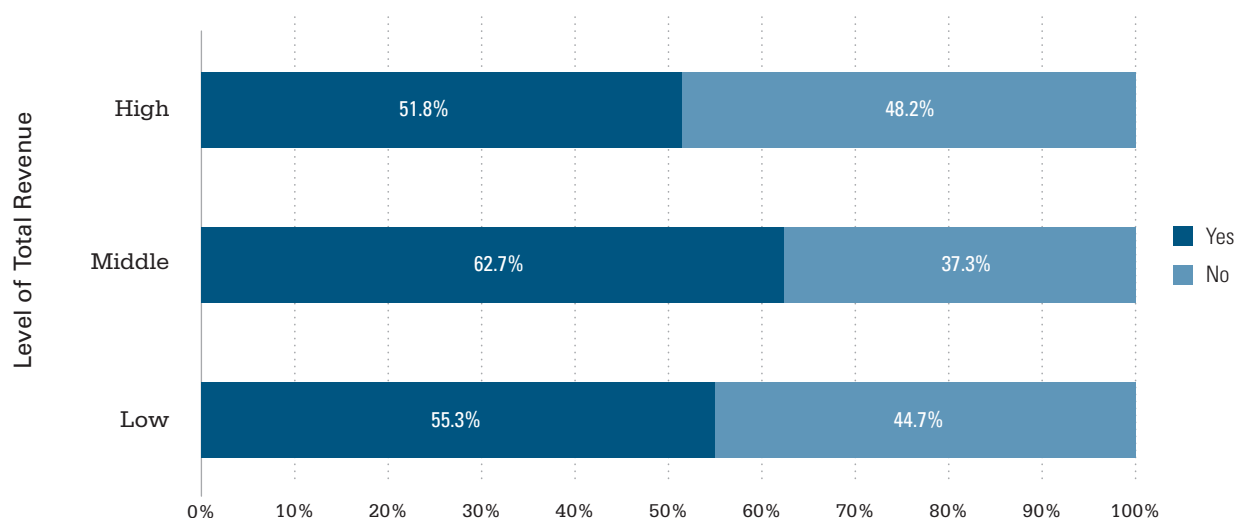
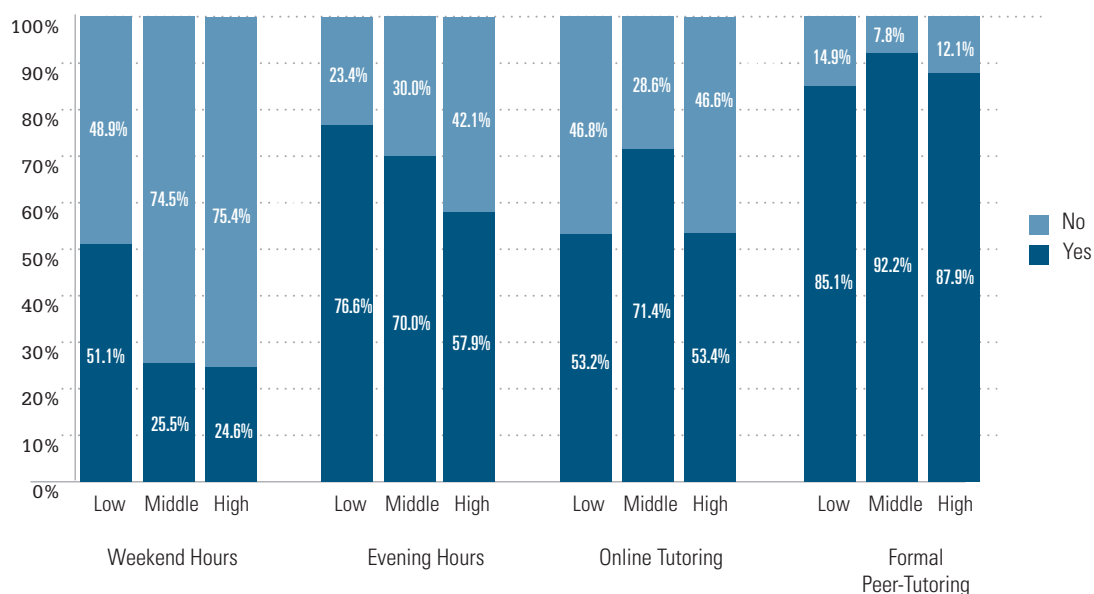


Figure 13. Tutoring Services Provided, Displayed by Level of Total Revenue



The majority of responding community colleges reported having face-to-face study skills workshops or courses available for students. Study skills workshops lasting one day or less were offered at over 63 percent of the institutions, short courses lasting less than a semester at 54.5 percent of the institutions, and semester-length courses at 81 percent of the institutions. Online study skills courses were provided for students at roughly half of the institutions (49.7 percent). Regarding the ratio of FTE students to FTE academic support professionals assigned to tutoring, high-revenue institutions had, on average, the lowest

ratio (971:1), while low-revenue institutions had the highest ratio (2,186:1).

As shown in Figure 12, the availability of supplemental instruction or structured learning assistance courses differed slightly by level of total revenue. Supplemental instruction was provided at institutions in the middle revenue level most prevalently (62.7 percent) and at just over half (51.8 percent) of the high-revenue institutions. Supplemental instruction was not offered by between a third and close to half of institutions across all revenue levels.

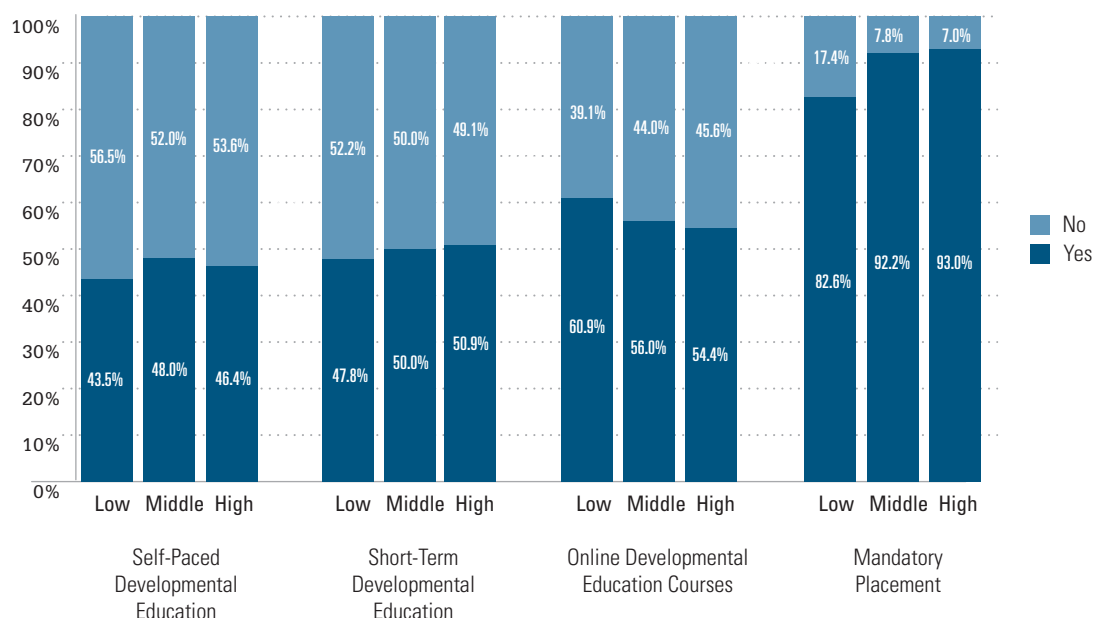
Figure 14. Developmental Education Structures, Displayed by Level of Total Revenue

Figure 13 illustrates the provision of tutoring by level of total revenue. Middle-revenue institutions offered formal peer tutoring (92.2 percent) and online tutoring (71.4 percent) more prominently, compared to low- and high-revenue institutions. Online tutoring was provided by almost 20 percent more middle-revenue institutions than low- or high-revenue institutions.

While low-revenue institutions had greater availability of tutoring during evenings (76.6 percent) and on weekends (51.1 percent), smaller proportions of high-revenue institutions provided tutoring during evenings (57.9 percent) and on weekends (24.6 percent).

Developmental Education

All institutions surveyed reported offering developmental education, as depicted in Figure 14. While mandatory placement for developmental education courses was reported by nearly all responding high-revenue and middle-revenue colleges (more than 90 percent in each revenue level), this practice was reported by a smaller proportion of low-revenue institutions (82.6 percent). Although online developmental education courses were reportedly offered by more than half of all institutions, smaller proportions of low-revenue institutions reported offering their students short-term developmental courses (47.8 percent) and self-paced developmental courses (43.5 percent) compared to middle-revenue and high-revenue institutions.

The majority of responding institutions, over 85 percent, reported having conducted formal evaluations

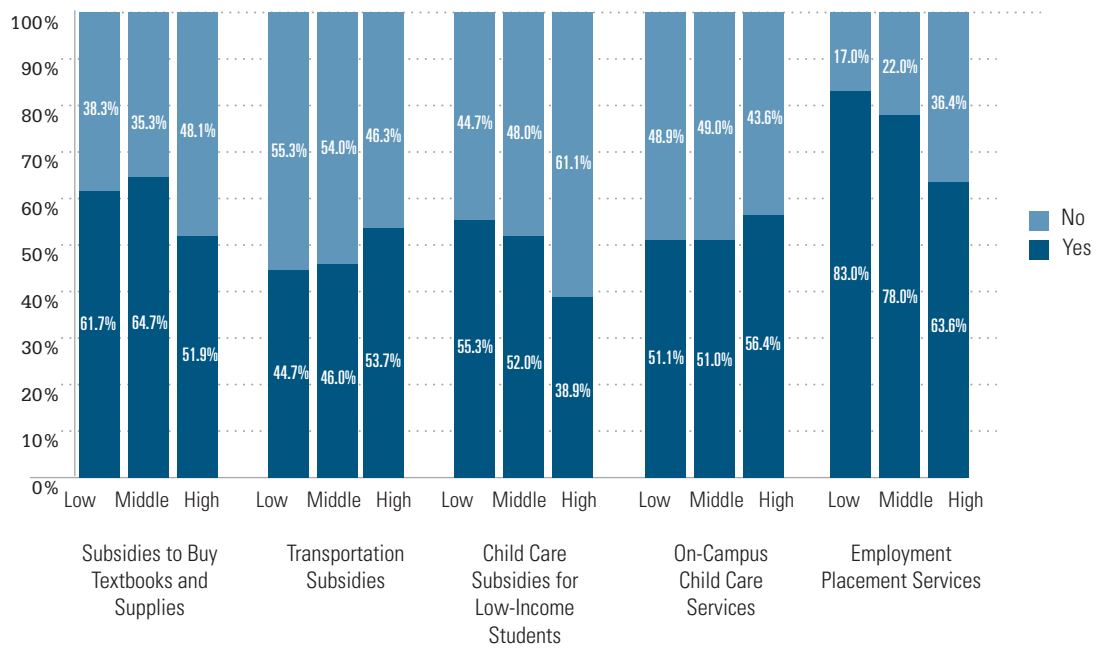
of their developmental education courses in the last five years. Furthermore, close to 80 percent of institutions had evaluated their developmental education placement policies during the same period.

Student Support

Community colleges support student academic success not only in classroom contexts but also through the student support structures within policies and programs that assist students who are balancing multiple responsibilities, roles, and challenges. Figure 15 presents student support structures broken out by level of total revenue. The proportion of colleges reporting that identified student support structures were in place on campus was fairly consistent across revenue levels, with differences of less than 20 percent across revenue levels for any given item.

Although over half of all institutions, regardless of total revenue level, provided on-campus child care services, child care subsidies for low-income students were provided by fewer high-revenue institutions (38.9 percent) than middle-revenue institutions (52 percent) and low-revenue institutions (55.3 percent). Transportation subsidies were offered by a higher proportion of high-revenue institutions (53.7 percent) compared to middle-revenue (46.0 percent) and low-revenue (44.7 percent) institutions. Subsidies for the purchase of textbooks and supplies were provided by over 64 percent of middle-revenue institutions, outpacing both low-revenue (61.7 percent) and high-revenue (51.9 percent) institutions.

Figure 15. Student Support Structures Offered, Displayed by Level of Total Revenue

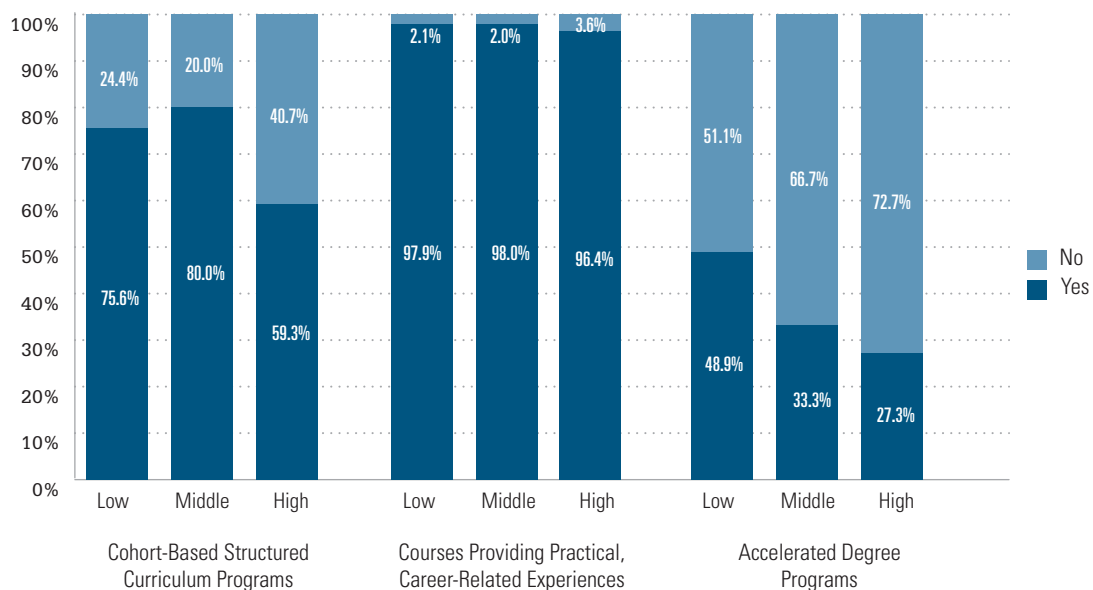


Curricular Structures

Curricular structures can make a difference in how community college students connect with the institution; they can also facilitate longer-term planning, promote integrated learning, and even help students form additional support networks with other students, practitioners, and faculty. Figure 16 displays survey results on curricular structures by level of total revenue.

Accelerated degree programs were less common among high- and middle-revenue institutions. While these programs were offered by nearly half (48.9 percent) of low-revenue institutions, 27.3 percent of high-revenue institutions offered similar programming. Courses that provided practical, career-related experiences were offered by nearly all responding colleges, ranging from 96.4 percent to 98.0 percent of institutions, regardless of revenue level. More than half

Figure 16. Curricular Structures Offered, Displayed by Level of Total Revenue



of responding institutions in each revenue level offered cohort-based, structured curriculum programs, in which a student cohort enrolls together in blocks of courses in a predesignated sequence over an entire curriculum. However, these programs were least common among high-revenue institutions (59.3 percent).

The types of learning community programs available

during the 2009-10 academic year differed in their prevalence at the responding institutions. Cohort-based programs were the most common (62.5 percent), followed by linked courses (51.6 percent), first-year experience programs (42.1 percent), and small-group discussions linked to course selections (35.2 percent), which were the least common.

Discussion: Making Sense of the National Picture

The new evidence from the Study of Community College Structures for Student Success suggests that U.S. community colleges are taking steps to organize for student success but are doing so in ways that vary in formality and extensiveness. The prevalence among these colleges of the key institutional practices and organizational structures examined in the study offers a glimpse into the current range of engagement in efforts to enhance student success on campuses throughout the country. Through this glimpse, the work of SCCSSS provides a national context through which community college leaders can understand efforts on their own campuses, options for improving practice, and ways to strengthen the organizational structures supporting their students' retention, successful transfer, and degree and certificate completion. In addition, national comparative data from the SCCSSS survey can help policymakers ground their discussions on up-to-date, extensive evidence of what community colleges are currently doing. This information, in turn, can lead to more productive and targeted national conversations about improving student success outcomes in community colleges and can also help guide explorations into ways to build on efforts currently in place.

SCCSSS survey results show that a large proportion of community colleges are engaging substantially in many of the key institutional practices at the center of this study. The results also show, however, notable variation among these colleges in the extent and depth of this engagement. Although it is beyond the scope of this study to explore staffing in detail, the findings hint at possible shortages of staff in key areas. The crucial need to increase community college student success and attainment — combined with the complexity of the challenges faced by community colleges in improving student outcomes — demands that all participants in the national conversation seek out ways to deepen the understanding of how engagement is occurring at colleges nationwide.

An essential key to the success of efforts to improve student outcomes is involving a wide range of

stakeholders across the campus community in these efforts (McClenney & McClenney, 2010). The prominent engagement of campus leadership in planning to improve student retention helps communicate that student success is a high priority at the institution, and it also can help the campus integrate student success improvement efforts more broadly into institutional decision making (see Foundational Leadership and Organizational Structures: Supporting Institutional Leadership and Intensity of Effort in the matrix of promising practices, in the appendix). SCCSSS survey results show that slightly more than half of the community colleges responding to the survey reported “extensive” or “very extensive” involvement of senior administrators in planning retention efforts at the institution. While the prevalence of this practice, at 52 percent, is encouraging on one level, this result throws into sharp relief the remaining 48 percent of responding colleges that need to cultivate greater involvement of senior administrators in planning retention efforts.

Community colleges also reported having dedicated substantial resources to coordinating student success efforts, with 68 percent of respondents stating that they had at least one administrator whose responsibilities included coordinating student retention efforts on campus. Moreover, of those colleges with a retention coordinator, the average FTE devoted to that role was .95. While these results, interestingly, were consistent across different levels of institutional revenue, the authority and discretion institutions afforded their retention coordinators varied across institutions. Among the colleges with retention coordinators, a substantial majority, 65 percent, reported that the individual in this role had at least some authority to *implement* new initiatives, but only 34 percent reported that the retention coordinator had at least some authority to *fund* new initiatives.

The SCCSSS review of the research and practice-oriented literature found that cultivating a positive institutional climate for diverse students and campus diversity in general was among the sets of practices

and structures aligned with student success (Barnett, 2011; Fike & Fike, 2008; Levin, Cox, Cerven, & Haberler, 2010; Schuetz, 2005). In the SCCSSS survey, larger community colleges (compared to smaller institutions) reported a greater prevalence of selected support structures for monitoring, assessing, and improving the campus climate for diversity. Relatively few community colleges with enrollments of less than 2,000 FTE, for example, had a committee charged with assessing the campus climate for racial/ethnic and cultural diversity or offered faculty development opportunities focusing on diversity issues on campus. The small and midsize colleges participating in SCCSSS were generally more homogeneous and predominantly white than the larger participating colleges. Even with respect to predominantly white institutions with relatively little structural diversity, however, these findings speak to a broadly applicable question regarding how well community colleges currently assess and address issues of diversity relevant to both campus climate and to student learning.

Fostering a culture of evidence on campus — another of the sets of practices and structures shown in the literature to be aligned with student success — was fairly widely reported in the survey responses. More than half of the responding institutions, for example, reported conducting annual analyses on student outcomes, except for transfer rates, that focused specifically on students enrolled in developmental education courses. Overall, the survey responses indicated that completion and retention may be receiving greater scrutiny than transfer pathways. Because students who transfer before receiving a credential, in effect, lower community college completion rates, giving more attention to student transfer as well as advocating for the inclusion of student transfer among the key outcomes of student success would benefit institutions.

Notable Patterns in the Survey Results

With regard to the specific policy levers explored in the SCCSSS survey, colleges varied in the structures and practices they reported. Moreover, the survey revealed that while many structures and practices were widely in place, the level of implementation support for them varied markedly across different campuses. The following selection of results from the national survey illustrates notable patterns, some of which suggest potential shortcomings at many community colleges.

- Almost all institutions reported offering student orientation, yet survey responses indicated that under 60 percent of responding colleges required first-time, first-year students to participate in student orientation. Moreover, 40 percent of these

programs did not include one-on-one academic advising. Research on effective college transition programs suggests that more intensive and structured efforts at new student orientation are needed to develop strong and effective programs (CCSSE, 2007; Purnell & Blank, 2004).

- The numbers of FTE financial aid counselors reported in the study often indicated high student-to-counselor ratios, ranging from just over 100:1 to nearly 7,000:1 — ratios that may be too high, given the large number of low-income students enrolled at community colleges and their need for financial aid support. This potential shortcoming is also suggested in a study by the National Association of Student Financial Aid Administrators (2011), which found community colleges much more likely than their four-year counterparts to report a shortage of financial aid counselors and support staff.
- The numbers of FTE academic support professionals employed for tutoring services at each institution showed high student-to-practitioner ratios, with a mean ratio of 1,394 FTE students to one FTE professional. As with high student-to-financial aid counselor ratios, high student-to-academic support practitioner ratios raise concerns regarding whether services for students are adequately resourced and equal to the complex task of improving student success outcomes.
- A majority of large institutions, 67.9 percent, reported having academic advisors focused specifically on transfer issues. Among small institutions, in contrast, the proportion of institutions having a similar resource was only 33.3 percent. While smaller colleges may have fewer resources than larger institutions, Integrated Postsecondary Education Data System (IPEDS) total transfer-out rates for responding colleges in all size categories were all quite close, ranging from 20 percent for large institutions to 23 percent for small institutions. Given the prominent national attention currently paid to transfer between two-year and four-year institutions as an issue, this finding highlights an opportunity for smaller colleges to target and enhance their support structures for successful student transfer.
- Early warning practices had not been implemented at 30 percent of responding community colleges, in spite of the literature supporting the importance of early intervention with nontraditional students.
- While 44 percent of responding colleges offered advising during evening hours and 68 percent offered evening tutoring services, very few colleges reported that weekend academic advising

(8 percent) or tutoring (32 percent) services were available to students.

- Online academic support programs, offered by 57 percent of responding institutions, address some need for flexible scheduling, and can serve as a seductively simple answer to complex issues facing community colleges and their students. However, many community college students who might benefit from extended academic support services may lack the experience and sense of agency required to access and use online teaching and learning tools, making these tools a poor fit particularly for adult learners and first-generation students, who often cite interpersonal connection and high-touch approaches as important for their academic success (Ziskin, Torres, Hossler, & Gross, 2010).

National, State, and Institutional Policy Recommendations

The SCCSSS survey findings have implications that suggest a number of recommendations for state and national policy as well as for institutional practice. Practitioner networks, national organizations, policymakers, and community colleges themselves should seek out ways — at community colleges in general and at smaller institutions in particular — to extend promising practices such as student orientation, academic advising focused on transfer, and early warning mechanisms. Additional specific recommendations include:

- Practitioner networks, states, and systems should encourage institutions to increase their focus on assessing and cultivating a positive institutional climate for diversity, and offer support and development opportunities.
- Likewise, networks, leaders, and policymakers should encourage and support colleges in enhancing their focus on student transfer.
- State and system accountability measures should include transfer as a successful student outcome and should support the use of data that both allows longer timelines and also captures student enrollment in multiple institutions over time.
- Colleges should carefully examine staff levels in their financial aid offices and academic support units.
- Colleges should extend the reach of orientation programs by instituting requirements for first-time students to participate.

- To enhance early warning programs, institutions should consider leveraging existing electronic communications resources and further reinforcing the awareness of academic support services through informal social media sites.
- Since only slightly more than half of the responding colleges reported offering some form of supplemental instruction (SI), institutions and academic support practitioner networks should expand implementation of SI and other promising, “high-touch” approaches to academic support.

This study has explored, documented, and raised some questions regarding the extent to which community colleges are providing sufficient services for the populations they serve. In addition to showing notable variation among colleges in the extent and depth of their engagement in student success efforts, SCCSSS survey results also hint at possible shortages of staff in key areas. Of course, if community colleges are investing too little in academic support services, financial aid support, advising, and other key practices, this may well be because of the inadequate models for funding community colleges in most states. As Hendrick, Hightower, and Gregory (2006) have observed, community colleges not only have the lowest levels of funding per student in our publicly funded postsecondary system, but their students also have the greatest levels of need for support, and their budgets in recent years have been steadily reduced.

Resources to Inform and Guide the Community College Student Success Agenda

As frequently noted in this report, the SCCSSS study has centered on developing two resources in support of community colleges’ efforts to improve student success on their campuses. The first resource is a matrix of promising practices, along with a list of resources keyed to each topic area, provided in stand-alone format in the appendix. It is our hope that college leaders and practitioners will be able to draw on this resource as a reference and as a tool for campus discussions. The second resource, the national comparative data from the survey results included in this report, can be used to contextualize campus efforts at individual colleges by providing information on the prevalence of key practices at similar institutions. For campus administrators wanting to know if they are *doing the right things*, the first step, often, is to seek out comparative data to learn *what peer institutions are doing*. Having access to this kind of data can form the basis for subsequent steps in addressing challenges and improving student success. In that vein, this survey of the institutional practices and organizational

structures currently used in community colleges' efforts to enhance student success can inform and guide the student success agendas and future initiatives at community colleges. This first national study of campus-based policies and practices focusing on community college student success sets a baseline for future research on this important topic, as well as a solid starting point for developing a sense of what is the norm among community colleges.

By providing national comparative data on the prevalence of key promising practices and the organizational structures currently in place at

community colleges, this SCCSSS research, likewise, offers foundational support for the efforts of national organizations and institutional and practitioner networks. It is our hope that this information will lead to more informed, targeted, and productive policy discussions about community colleges' institutional practice surrounding student outcomes. The resources developed through this study, therefore, are presented in support of these institutions, practitioners, leaders, and networks that will ultimately make the difference in increasing community college student success and attainment throughout the country.

Note on the Data

Data for this report come from responses to a survey administered to community colleges nationwide in 2011 as part of the Study of Community College Structures for Student Success (SCCSSS). SCCSSS is a collaboration of the College Board, the Project on Academic Success at Indiana University, and the Center for Enrollment Research, Policy, and Practice at the University of Southern California. Using IPEDS 2005 Carnegie classifications, the SCCSSS team identified 1,050 public community colleges and private not-for-profit community colleges nationwide for potential participation in the study.³ Of this total, administrators from 236 colleges responded, yielding a 22 percent response rate. The survey itself focused on institutional practices and organizational structures identified in the research and practical literature as promising support for community college student success. Respondents at community colleges answered survey questions focusing on the coordination and institutional resources dedicated to student success efforts; the use of student success data; and the structures and resources dedicated to student orientation programs, academic advising, financial aid, student support services, early warning mechanisms, developmental education, and learning communities.

Survey data were merged with IPEDS data on institutional characteristics to contextualize and group findings for similar colleges together. Explorations

using the compiled IPEDS and survey data revealed that responding institutions were representative of community colleges nationally in terms of retention rates, graduation rates, percentages of Pell Grant recipients, and percentages of adult learners enrolled. In each of these categories, differences between the population and the sample were never greater than 2 percent.

Throughout the report, survey responses are broken out, where possible, by institutional characteristics, particularly by institutional wealth (i.e., total revenue over FTE students enrolled) and by enrollment size (i.e., FTE students enrolled). In order to group findings by relative institutional wealth and, therefore, to provide important contextual information for the structures and policies that respondents described, institutions' total revenues per FTE were calculated, and the levels of total revenue were defined as follows: *low*, less than \$10,500 (33.8 percent); *middle*, between \$10,500 and \$12,999 (32 percent); and *high*, \$13,000 or higher (34.2 percent). As with other institutional characteristics, the distribution among responding institutions of total revenue per FTE was consistent with the distribution in the population of community colleges nationally, which is 33.2 percent at the low level, with total revenue per FTE of less than \$10,500; 31.5 percent at the middle level; and 35.3 percent at the high level, with total revenues of \$13,000 per FTE or higher (see Figure 17).

Institutions were also categorized by size based on the number of full-time equivalent enrollments during the 2008–2009 year. Among the responding institutions, 24.6 percent had enrollments less than 2,000, 36.9 percent had enrollments ranging from 2,000 to 4,499, and 38.6 percent had enrollments above 4,500. The corresponding population percentages are as follows:

3. Community colleges with the following Carnegie classifications were selected for the SCCSSS survey: Associate's — Public Rural-Serving; Associate's — Public Urban-Serving; Associate's — Public Special Use; Associate's — Private Not-for-Profit; Associate's — Public 2-Year Colleges Under 4-Year Universities; Associate's — Public 4-Year, Primarily Associate's; and Associate's—Private Not-for-Profit 4-Year, Primarily Associate's. These institutions encompassed the group of colleges that (1) had multiple missions and (2) granted primarily associate's degrees.

35 percent in the *small* enrollment category, 31.2 percent in the *midsize* category, and 33.7 percent in the *large* category with enrollments of more than 4,500 FTE (see Figure 18). Small colleges, therefore, are somewhat underrepresented among the responding institutions —

an unsurprising pattern, considering that resources for participating in surveys may be more limited at smaller institutions. We have presented results for small, midsize, and large institutions separately on results where practices may differ by enrollment size in particular.

Figure 17. Responding Institutions Compared to Community Colleges Nationwide: Total Revenue per FTE

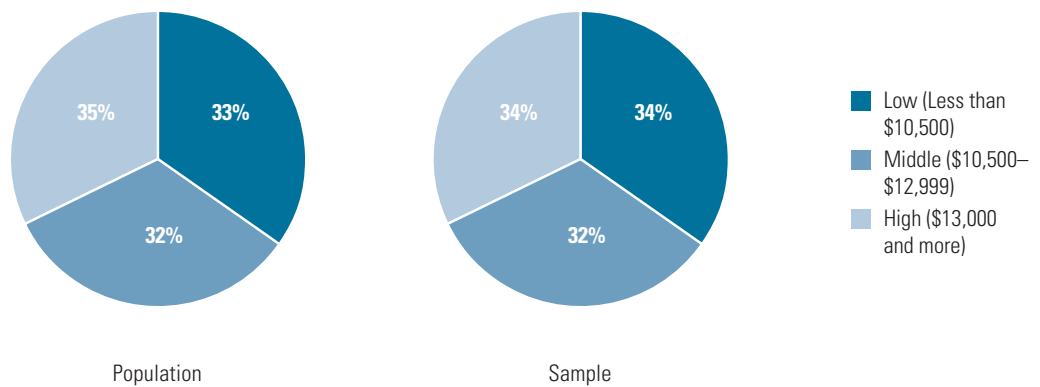
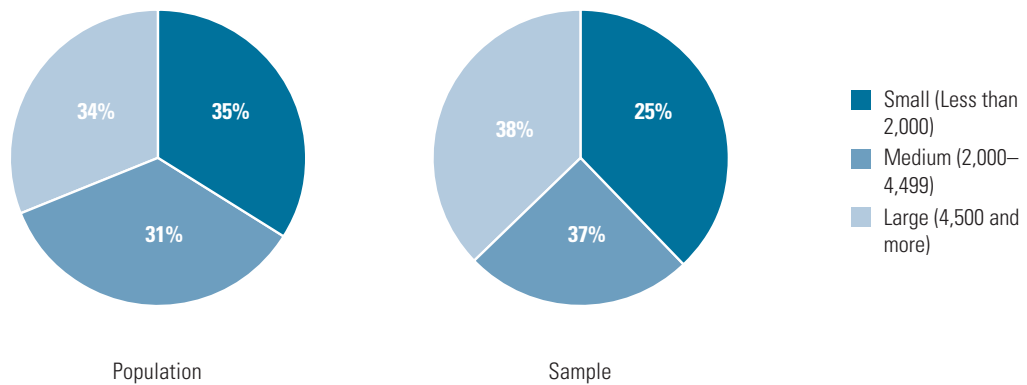


Figure 18. Responding Institutions Compared to Community Colleges Nationwide: Enrollment Size



Appendix

Foundational Leadership and Organizational Structures

1. Supporting Institutional Leadership and Intensity of Effort

Objectives	Promising Practices
Clearly delineate roles and responsibilities for institutional retention/diversity efforts	<p>Designate an individual to coordinate and oversee retention/diversity efforts who has</p> <ul style="list-style-type: none"> • Authority and time to carry out efforts • Clear reporting lines from individual to more senior institutional leaders • Expertise to carry out empirical research on efficacy of retention programs • A dedicated budget for initiating and sustaining retention efforts <p>Create a standing committee to oversee retention/diversity efforts (also see Foundational Leadership 2)</p> <ul style="list-style-type: none"> • Meet periodically to monitor and evaluate institutional efforts to promote student retention/diversity
Integrate retention/diversity efforts across the campus	<ul style="list-style-type: none"> • Integrate system of student services to support student retention (also see Policy Lever 2) • Involve various members of campus community in planning and priority-setting process • Facilitate cross-division communication
Show a visible institutional commitment to student persistence, learning, and success	<p>Communicate a mission and vision with a focus on student persistence, learning, and success</p> <ul style="list-style-type: none"> • Have key institutional documents and policies incorporate a focus on learning • Communicate to internal and external constituents <p>Formally adopt a written retention/diversity plan to increase accountability</p> <ul style="list-style-type: none"> • Incorporate realistic short- and long-term retention, progression, and completion goals • Periodically evaluate and update retention plan • Communicate with various constituents on campus about changes to the retention plan • Dedicate resources to support retention efforts in the retention plan
Create a learner-centered institution in which leadership reflects a focus on learning	<ul style="list-style-type: none"> • Ensure that funding policies and resource allocation focus on student learning • Emphasize student learning in recruiting, hiring, deploying, evaluating, and developing personnel • Clearly define outcomes for student learning • Systematically document and assess student learning (also see Foundational Leadership 3)
Exercise leadership and base decisions on proven retention strategies	<ul style="list-style-type: none"> • Make use of student data to drive decision making • Regularly examine key performance indicators of student success • Support allocation and reallocation of resources to promote student success • Provide and support professional development for faculty on using student outcomes data

2. Cultivating a Positive Institutional Climate for Diversity	
Objectives	Promising Practices
Create a welcoming and nondiscriminatory environment	<p>Initiate a formal written or strategic plan for racial and cultural diversity</p> <ul style="list-style-type: none"> Designate a campus committee charged with assessing campus climate for racial and cultural diversity and advising on diversity-focused initiatives
	<p>Clarify antidiscrimination policies and practices</p> <ul style="list-style-type: none"> Enforce a zero-tolerance antidiscrimination policy Provide antidiscrimination and diversity training or workshops for faculty, students, and staff Formally assess student perceptions of the campus climate on racial and cultural diversity Develop a formal process through which students can report discrimination
	<p>Train personnel in racial and cultural diversity</p> <ul style="list-style-type: none"> Hire and retain diverse faculty who reflect the student body's racial and ethnic composition Offer faculty development programs focusing on racial and cultural diversity Ensure that faculty utilize culturally relevant pedagogies and collaborative learning Provide multicultural training for staff
	<p>Create a user-friendly, accessible campus (also see Policy Lever 2)</p> <ul style="list-style-type: none"> Display clear signage to orient students to resources and locations Offer resource fairs to familiarize students with academic and co-curricular resources Identify and remove bureaucratic barriers to success Reorganize services to help students develop know-how to navigate campus Ensure high levels of faculty–student interaction
Reflect student diversity and assist students from diverse racial and cultural backgrounds in feeling welcome inside and outside of class	<p>Provide academic programs with a cultural heritage focus (also see Policy Lever 3)</p> <ul style="list-style-type: none"> Offer courses in ethnic studies reflecting the student population Create learning communities, linked courses, or cohorts composed of racially and culturally diverse students, and/or thematically focused on issues of diversity Provide intensive English instruction in writing and reading about students' cultural experiences and identity
	<p>Ensure that support units reflect student racial and cultural diversity</p> <ul style="list-style-type: none"> Establish multicultural resource centers and programs targeting students from diverse racial and cultural backgrounds that integrate support services such as advising, counseling, and tutoring (also see Policy Lever 2) Provide support for racially/ethnically focused student organizations Collaborate with other colleges and universities to provide leadership development opportunities for underrepresented students (African Americans, Latinos, Native Americans, Pacific Islanders, and Southeast Asians) Develop formal and informal mentoring relationships between students and faculty/staff/peers Provide mentoring opportunities with professionals who are racially/culturally diverse
Support academic transitions into community college for diverse student populations	<p>Identify student needs (also see Foundational Leadership 3)</p> <ul style="list-style-type: none"> Use student assessment results and self-reported high school behaviors to connect students to appropriate academic resources Track and monitor students Disaggregate data on diverse populations based on race/ethnicity, language background, immigration status, generational status, and gender to identify achievement gaps Employ early warning systems

	<p>Provide academic support programs (also see Policy Lever 3)</p> <ul style="list-style-type: none"> • Provide precollege, college preparation, and summer bridge programs • Support presence of TRIO programs, e.g., student support services to help first-generation, low-income students • Encourage collaboration between faculty and staff in team-teaching freshman seminars and success courses • Conduct outreach to high school students to familiarize them with college programs and minimize the number of students in developmental education • Offer peer tutoring <p>Promote informed student decision making (also see Policy Lever 2)</p> <ul style="list-style-type: none"> • Promote frequent advising and proactive counseling • Ensure program-level advising
<p>Expand opportunities for students to engage with diverse perspectives and lessen prejudice and discrimination</p>	<p>Develop curricular opportunities that infuse diversity-related topics</p> <ul style="list-style-type: none"> • Increase diverse and global perspectives in the curriculum • Offer intergroup dialogue (facilitated, face-to-face meetings between students from two or more social identity groups that have a history of conflict or potential conflict) • Create and support education-abroad opportunities • Develop service-learning opportunities with the local community <p>Provide co-curricular opportunities</p> <ul style="list-style-type: none"> • Provide intercultural workshops and seminars for students • Sponsor cultural and diversity-focused events • Provide volunteer opportunities with the local community

3. Fostering a Culture of Evidence	
Objectives	Promising Practices
Build a culture of evidence	<ul style="list-style-type: none"> Foster an institutional culture promoting willingness of governing board members, administrators, faculty, staff, and students to rigorously examine and openly discuss institutional performance regarding student persistence, learning, and attainment Commit to cohort tracking of entering students to determine rates of attainment and to identify areas for improvement Regularly assess performance and progress in implementing educational practices, which evidence shows will contribute to higher levels of student persistence and learning Routinely use results of student and institutional assessments to inform institutional decisions regarding strategic priorities, resource allocation, faculty and staff development, and improvements to programs and services for learners Base in evidence all beliefs and assertions about “what works” in promoting student learning and attainment Create suitable accountability systems Be willing to experiment with ways to improve student learning Allocate resources toward research
Create a strong institutional research department	<ul style="list-style-type: none"> Train institutional researchers to collect data, organize data, and conduct analyses of data Conduct in-depth studies on the institution (using such means as student interviews and data on student use of support services) Ensure institutional research and information systems provide systematic, timely, useful, user-friendly information about student persistence, learning, and attainment Ensure the ability to carry out quantitative and qualitative research Promote collaboration between academic, institution, and state-level researchers
Systematically collect, analyze, and report data	<p>Collect data about student learning, engagement, retention, and diversity</p> <p>Collect data on student characteristics, which include but are not limited to</p> <ul style="list-style-type: none"> Demographics: e.g., sex, race/ethnicity, age, size of high school, parent level of education, socioeconomic status Academic performance: e.g., admission test scores, high school rank and GPA, placement test scores Academic plans: e.g., choice of major, level of highest degree aspiration Nonacademic variables: e.g., academic goals, achievement motivation, self-concept, social involvement, interest patterns Self-reported needs: expressed need for instructional support (e.g., writing, mathematics, reading, study skills) and expressed need for noninstructional support (e.g., choice of major, disability support, personal counseling, co-curricular involvement) Student opinions and attitudes, including a broad-based assessment of student opinions and attitudes on instructional and noninstructional programs, services, and policies <p>Collect data pertaining to outcomes, such as successful completion and persistence in developmental and college-level courses</p> <ul style="list-style-type: none"> Disaggregate and report data depicting student persistence, learning, and attainment by student characteristics including gender, race/ethnicity, and income level <p>Analyze data for student progress through milestones and key enrollment patterns. According to Moore and Shulock (2010):</p> <ul style="list-style-type: none"> Milestones include second-term retention, second-year retention, 12+ college credits, 30+ college credits, completion of transfer curriculum (60 transferrable credits, including English and mathematics), certificate, associate degree, transfer-with transfer curriculum, transfer-without transfer curriculum Enrollment patterns include full-time attendance in first term, completion of college success course, continuous enrollment, passing college-level mathematics and English in two years, completing 20+ credits in first year, earning summer credits, percent of course withdrawals, percent of course late registrations

Act upon student data collected to improve programs and services	Make data on student outcomes widely available to administrators, faculty, and student services staff; ensure use of these in decisions about design or improvement of programs and services
	<p>Coordinate a system to review, assess, and evaluate programs, utilizing student data to</p> <ul style="list-style-type: none">• Identify problem areas or issues• Drive policy• Inform decision making• Set goals• Allocate resources• Measure progress• Assure accountability

Policy Levers	
1. Facilitating Access to Financial Aid	
Objectives	Promising Practices
Minimize financial barriers to student success	<p>Provide access to various types of aid available to students (grants, campus-based work-study programs, federal and state loans, scholarships)</p> <ul style="list-style-type: none"> • Participate in the federal loan program • Increase institutional aid • Partner with local organizations and businesses to provide financial support and incentives • Offer flexible payment options such as installment plans • Provide emergency loans • Incorporate students' direct and indirect costs when describing college expenses • Create campus-based work-study programs • Provide aid to students in a timely manner • Offer institutional aid to part-time students • Make award letters easy to understand • Offer subsidies to buy textbooks and supplies
	<p>Link financial aid with other college processes</p> <ul style="list-style-type: none"> • Provide financial aid application upon course registration • Provide information on financial aid when promoting academic support • Tie full-time enrollment and academic achievement to eligibility for certain campus-based work to provide low-income students a way to better integrate to campus and maintain high performance • Include reminders about FAFSA in scholarship award letters to ensure students seek multiple forms of aid • Require students on academic probation to meet with financial aid counselors
Communicate information about financial aid to students in an effective and extensive manner	<p>Utilize multiple methods of disseminating information that are culturally and linguistically appropriate</p> <ul style="list-style-type: none"> • Provide information in multiple formats (e.g., paper, online, in person) to reach more students with accurate and timely information • Provide bilingual services and materials • Offer information and access to financial aid services during evening and weekend hours • Involve families of students when providing financial aid information and materials
	<p>Forge partnerships with local organizations to disseminate information about financial aid</p> <ul style="list-style-type: none"> • Coordinate activities with high school counselors and representatives to provide grade-specific college and financial aid information to students • Partner with other local colleges and universities to offer financial aid information and counseling • Engage multilanguage media and community leaders to drive awareness of financial aid options • Support state or regional efforts to improve financial aid application rates
	<p>Improve student access to financial aid counseling</p> <ul style="list-style-type: none"> • Integrate financial aid counseling with other outreach activities • Facilitate online completion of FAFSA • Require students to meet with financial aid counselors • Make financial aid labs available • Provide one-on-one assistance with financial aid • Increase the number of staff supporting financial aid • Increase training for financial aid staff to ensure up-to-date information and utilization of best approaches to working with students
Incorporate evaluation metrics and data collection to enhance financial aid practices	<ul style="list-style-type: none"> • Determine how students are most likely to complete FAFSA and steer efforts to this end (also see Foundational Leadership 3)

2. Developing Excellence and Coordination in Student Support Services	
Objectives	Promising Practices
Integrate students into the larger college community	Provide orientation with quality of content and effective delivery: <ul style="list-style-type: none"> • Require for all incoming students • Provide individual and group orientation • Focus content on expectations, credit requirements, guidelines, services, and resources available to students
Ensure that advising and counseling is readily accessible to students	<ul style="list-style-type: none"> • Limit the number of advisees per advisor • Require degree-seeking students to meet with an advisor • Provide an interactive online advising system • Have advisors advocate on students' behalf, including, when necessary, petitioning the institution for student reenrollment or serving as liaison between students and instructors
Ensure student assistance with course and program planning	<ul style="list-style-type: none"> • Develop an individual learning plan for each student, with a focus on short- and long-term goals • Help students plan degree path or course selection • Help students recognize, plan for, and meet appropriate prerequisites • Make sure that students who intend to transfer complete a transfer curriculum with the necessary gateway courses and credits • Help students with academic planning, avoiding overloading and arranging convenient class schedules • Make sure advising takes place prior to course registration
Use faculty advisors to enhance faculty–student interaction by providing engaged academic guidance and counseling	<ul style="list-style-type: none"> • Ensure quality by training advisors • Assign advisors to students upon first enrolling • Allow students the option of staying with the same advisor for their entire college career to forge a stronger relationship
Ensure proactive monitoring of students	<ul style="list-style-type: none"> • Place academic advisors in departments struggling with retention • Require periodic check-ins (at least once per semester) to assess progress toward goals, rather than offering support only in response to triggers • Coordinate early-warning systems among faculty and advising staff when student grades are suffering • Call students during the first three weeks of semester if they miss class • Connect students who miss class with needed services • Utilize technology to monitor struggling students and to determine who is at risk of dropping out
Provide academic support	<ul style="list-style-type: none"> • Require student success courses for new-to-college students (also see Policy Lever 3) • Offer supplemental instruction • Offer study groups • Provide effective remediation (also see Policy Lever 3) • Offer tutoring, including individual and small group tutoring, professional and peer tutors, and online or technology-enhanced tutoring • Offer support services tailored to needs of ADA students
Create multiservice student support programs or one-stop centers that bring together different components of student support services	<ul style="list-style-type: none"> • Plan and coordinate collaboration with various departments, including student services, academic affairs, information technology, and facilities departments • Cross-train personnel to ensure consistent and accurate knowledge • Provide suitable locations with appropriate technology, including computer stations, etc.
Provide career counseling	<ul style="list-style-type: none"> • Offer individualized counseling in choosing majors and career goals • Help students see connections between their educational program and career goals • Help students find employment while enrolled that is also linked to their career goals
Provide personal guidance and counseling	<ul style="list-style-type: none"> • Provide trained peer counseling to discuss students' concerns and share information • Offer mentoring with faculty, staff, and alumni to discuss students' concerns and goals • Provide one-on-one counseling on issues such as domestic violence, stress, depression, and health emergencies • Bring together students with similar problems, e.g., eating disorders, single parents, etc., to discuss and support each other in a group setting • Provide referrals to external agencies for additional assistance

Provide child care to students with children	<ul style="list-style-type: none"> • Provide high-quality child care on campus with flexible options including drop-in, evening and weekend, and infant services, and on-campus care for older children and teenagers • Provide referral to high-quality child care off campus • Offer child care vouchers and/or subsidies
Provide other logistical support to students	<ul style="list-style-type: none"> • Provide public transport, gas vouchers, and/or subsidies for transportation • Facilitate access to “safety-net” services, including Medicaid, food stamps, and earned income credits • Offer housing assistance • Offer legal assistance • Provide textbook vouchers or book subsidies
Ensure that students are aware of available support	<ul style="list-style-type: none"> • Mount aggressive outreach and marketing campaigns • Work with local welfare, workforce agencies and community-based organizations to provide ongoing academic and personal counseling, financial aid assistance, on-campus child care, and access to work-based “safety-net” services to help low-wage working students access all the benefits to which they are entitled

3. Providing Curricular Structure, Opportunities, and Focus

Objectives	Promising Practices
Set up students for early success through completion of gateway courses	<ul style="list-style-type: none"> • Ensure that all students take a first-year English composition course • Ensure that beginning students take an entry college-level mathematics course • Require that students take a student success course (encompassing study skills, time management, effective college habits, exploring different learning styles, and developing plans for college and careers)
Provide quality remediation or developmental courses for academically underprepared students	<ul style="list-style-type: none"> • Mandate course placement testing and require effective developmental course work for those who need it • Offer accelerated developmental programs that focus on specific, targeted issues for remediation and allow students to move into college-level work more quickly, e.g., “brush up” workshops rather than semester-long remediation courses, especially in mathematics courses; redesign developmental courses into modules so that students repeat only needed sections • Improve the quality of noncredit remediation courses with clear articulation between remediation and credit courses, and integration of remedial and occupational skills courses • Utilize early assessment programs that provide high school juniors with feedback on the likelihood of needing remediation to reduce the need for remediation after enrollment
Encourage credit accumulation through conducive enrollment procedures	<ul style="list-style-type: none"> • Ensure adequate course offerings • Limit late registration, impose late registration fees, and limit course drops • Offer dual enrollment courses for students to earn college credit while in high school
Encourage full-time enrollment, which contributes to degree completion	<ul style="list-style-type: none"> • Encourage students to begin as full-time students or take as full a load as possible • Lower per-credit fees for full-time students
Experiment with high-quality pedagogical approaches in courses	<ul style="list-style-type: none"> • Create learning communities especially for first-year students, linking courses and creating cohorts, for students to pursue a deeper understanding of materials and form deeper bonds with classmates and faculty • Offer courses with instructional approaches including but not limited to the following: problem-based learning, inquiry-based learning, active learning, project-based or contextualized learning, and applied learning
Reduce the time to degree completion	<ul style="list-style-type: none"> • Provide greater course flexibility through online, summer, evening, weekend, and self-paced courses • Offer accelerated programs with modularized or short-term certificate development to credit-level degree programs for adult education, especially in high-growth fields
Offer experiential or hands-on learning beyond the classroom	<ul style="list-style-type: none"> • Extend opportunities for learning beyond the class to a real-world environment, including offering students internships, co-op experience, apprenticeships, field experience, clinical assignments, and community-based projects
Create clearly articulated career pathways	<ul style="list-style-type: none"> • Package nontraditional course offerings that include short-term training options or single courses that working students can take in a particular career area • Allow students to enter or exit at multiple points as they continue to build on existing college credentials

Resources by Topic Area

Foundational Leadership and Organizational Structures 1 (Supporting Institutional Leadership & Intensity of Effort)

Boswell, K., & Wilson, C. D. (2004). *Keeping America's promise: A report on the future of the community college*. Denver, CO: Education Commission of the States.

Community College Survey of Student Engagement (CCSSE). (2007). MetLife Foundation best-practice colleges: Building relationships for student success. *CCSSE Highlights*, 6(3).

Habley, W. R., & McClanahan, R. (2004). *What works in student retention? Two-year public colleges*. Iowa City, IA: ACT, Inc.

Hossler, D. (1984). *Enrollment management: An integrated approach*. New York, NY: College Entrance Examination Board.

Hossler, D. (2006). Managing student retention: Is the glass half full, half empty, or simply empty? *College and University*, 81(2), 11–14.

Jenkins, D., Bailey, T. R., Crosta, P., Leinbach, T., Marshall, J., Soonachan, A., & Van Noy, M. (2006). *What community college policies and practices are effective in promoting student success? A study of high- and low-impact institutions*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Jenkins, D., Ellwein, T., Wachen, J., Kerrigan, M. R., & Cho, S. (2009). *Achieving the Dream colleges in Pennsylvania and Washington State: Early progress toward building a culture of evidence*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Kemerer, F. R., Baldrige, J. V., & Green, K. C. (1982). *Strategies for effective enrollment management*. Washington, DC: American Association of State Colleges and Universities.

Liebowitz, M., & Taylor, J. C. (2004). *Breaking through: Helping low-skilled adults enter and succeed in college and careers*. Boston, MA; Columbus, OH: Jobs for the Future and National Council for Workforce Education.

McClenney, K., & McClenney, B. (2010). *Community college inventory: Focus on student persistence, learning, and attainment*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

Moore, C., Shulock, N., & Offenstien, J. (2009). *Steps to success: Analyzing milestone achievement to improve community college student outcomes*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.

Muston, R. A. (1985). Role ambiguity in institutional marketing and enrollment management. *Research in Higher Education*, 22(4), 371–379. doi:10.1007/BF00974211

Noel-Levitz. (2007). *Student retention practices at two-year institutions*. Iowa City, IA: Author. Retrieved from www.noellevitz.com/retentionpractices

Foundational Leadership and Organizational Structures 2 (Cultivating a Positive Institutional Climate for Diversity)

Achieving the Dream, Community Colleges Count. (2010). *Promising practices: Equity 2010 leader colleges*. Retrieved from <http://www.achievingthedream.org/Portal/Modules/5cdc3f0e-8669-4608-9b7c-2c834e623297.asset?>

Achieving the Dream, Community Colleges Count. (2011). *Promising practices: Equity 2011 leader colleges*. Retrieved from <http://www.achievingthedream.org/Portal/Modules/69734382-a0eb-4f30-9071-d61034a41eb7.asset?>

Barnett, E. (2011). Validation experiences and persistence among community college students. *The Review of Higher Education*, 34(2), 193–230.

Clements, E. (2000). Creating a campus climate in which diversity is truly valued. *New Directions for Community Colleges*, 112, 63–72.

Community College Consortium for Immigrant Education. (2011). *Increasing opportunities for immigrant students: Community college strategies for success*. Valhalla, NY: Westchester Community College, Community College Consortium for Immigrant Education.

Deil-Amen, R., & Rosenbaum, J. E. (2003). The social prerequisites of success: Can college structure reduce the need for social know-how? *The Annals of the American Academy of Political and Social Science*, 586, 120–143.

Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review*, 36(2), 68–88.

Hirschy, A. S., Bremer, C. D., & Castellano, M. (2011). Career and technical (CTE) student success in community colleges: A conceptual model. *Community College Review*, 39(3), 296–318.

Hurtado, S., Griffin, K. A., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education*, 1(4), 204–221.

Kibler, A. K., Bunch, G. C., & Endris, A. K. (2011). Community college practices for U.S.-educated language-minority students: A resource-oriented framework. *Bilingual Research Journal*, 34, 201–222.

Levin, J. S., Cox, E. M., Cerven, C., & Haberler, Z. (2010). The recipe for promising practices in community colleges. *Community College Review*, 1(1), 31–58.

Lew, J. W., Chang, J. C., & Wang, W. W. (2005). The overlooked minority: Asian Pacific American students at community colleges. *Community College Review*, 33(2), 64–84.

McConnell, P. J. (2000). ERIC review: What community colleges should do to assist first-generation students. *Community College Review*, 28(3), 75–87.

Nitecki, E. M. (2011). The power of the program: How the academic program can improve community college student success. *Community College Review*, 39(2), 98–120. doi:10.1177/0091552111404926

Pope, M. L. (2002). Community college mentoring: Minority student perception. *Community College Review*, 30(3), 31–45.

Price, D. B., Hyle, A. E., & Jordan, K. V. (2009). Ties that blind: Perpetuation of racial comfort and discomfort at a community college. *Community College Review*, 37(1), 3–33.

Schuetz, P. (2005). Campus environment: A missing link in studies of community college attrition. *Community College Review*, 32(4), 60–80.

Stovall, M. (2000). Using success courses for promoting persistence and completion. *New Directions for Community Colleges*, 112, 45–54.

Szeleyni, K., & Chang, J. C. (2002). Educating immigrants: The community college role. *Community College Review*, 30(2), 55–73.

Zhang, Y. L. (2011). Education abroad in the U.S. community colleges. *Community College Review*, 39(2), 181–200.

Foundational Leadership and Organizational Structures 3 (Fostering a Culture of Evidence)

Bailey, T. R., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges*. Indianapolis, IN: Lumina Foundation for Education.

Habley, W. R., & McClanahan, R. (2004). *What works in student retention? Two-year public colleges*. Iowa City, IA: ACT.

Hossler, D. (2006). Managing student retention: Is the glass half full, half empty, or simply empty? *College and University*, 81(2), 11–14.

Jenkins, D., Bailey, T. R., Crosta, P., Leinbach, T., Marshall, J., Soonachan, A., & Van Noy, M. (2006). *What community college policies and practices are effective in promoting student success? A study of high- and low-impact institutions*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Jenkins, D., Ellwein, T., Wachen, J., Reid Kerrigan, M., & Cho, S. (2009). *Achieving the Dream colleges in Pennsylvania and Washington State: Early progress toward building a culture of evidence*. New York, NY: Community College Research Center, Teachers College, Columbia University.

McClenney, K. (2004). *Keeping America's promise: Challenges for community colleges* (A joint publication of the Education Commission of the States and the League for Innovation in the Community College). Denver, CO: Education Commission of the States.

McClenney, K., & McClenney, B. (2010). *Community college inventory: Focus on student persistence, learning, and attainment*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

McClenney, K., McClenney, B., & Peterson, G. F. (2007). A culture of evidence: What is it? Do we have one? *Planning for Higher Education*, 35(3), 26–33.

Moore, C., & Shulock, N. (2010). *Divided we fail: Improving completion and closing racial gaps in California's community colleges*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.

Morest, V., & Jenkins, D. (2007). *Institutional research and the culture of evidence at community colleges*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Policy Lever 1 (Facilitating Access to Financial Aid)

Community College Survey of Student Engagement (CCSSE). (2008). *High expectations and high support*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

JBL Associates. (2010). *The financial aid challenge: Successful practices that address the underutilization of financial aid in community colleges*. New York, NY: The College Board.

Mendoza, P., Mendez, J. P., & Malcolm, Z. (2009). Financial aid and persistence in community colleges: Assessing the effectiveness of federal and state financial aid programs in Oklahoma. *Community College Review*, 37(2), 112–135.

Orozco, V., & Mayo, L. (2011). *Keeping students enrolled: How community colleges are boosting financial resources for their students*. New York, NY: Demos.

Santiago, D. A. (2010). *Reality check: Hispanic-serving institutions on the Texas border strategizing financial aid*. Washington, DC: Excelencia in Education.

Schuetz, P. (2005). Campus environment: A missing link in studies of community college attrition. *Community College Review*, 32(4), 60–80.

Policy Lever 2 (Developing Excellence and Coordination in Student Support Services)

Brock, T., & LeBlanc, A. (2005). *Promoting student success in community college and beyond: The Opening Doors demonstration*. New York, NY; Oakland, CA: MDRC.

Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success (A first look)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

Community College Survey of Student Engagement (CCSSE). (2007). MetLife Foundation best-practice colleges: Building relationships for student success. *CCSSE Highlights*, 6(3).

Gardenhire-Crooks, A., Collado, H., & Ray, B. (2006). *A whole 'nother world: Students navigating community college* (Opening Doors Project Report). New York, NY; Oakland, CA: MDRC.

Jenkins, D., Bailey, T. R., Crosta, P., Leinbach, T., Marshall, J., Soonachan, A., & Van Noy, M. (2006). *What community college policies and practices are effective in promoting student success? A study of high- and low-impact institutions*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Jenkins, D., Ellwein, T., Wachen, J., Reid Kerrigan, M., & Cho, S. (2009). *Achieving the Dream colleges in Pennsylvania and Washington State: Early progress toward building a culture of evidence*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Liebowitz, M., & Taylor, J. C. (2004). *Breaking through: Helping low-skilled adults enter and succeed in college and careers*. Boston, MA; Columbus, OH: Jobs for the Future and National Council for Workforce Education.

Matus-Grossman, L., & Gooden, S. (2002). *Students' perspectives on juggling work, family, and college*. New York, NY; Oakland, CA: MDRC.

McArthur, R. C. (2005). Faculty-based advising: An important factor in community college retention. *Community College Review*, 32(1), 1–18. doi:10.1177/009155210503200402

Moore, C., Shulock, N., & Offenstien, J. (2009). *Steps to success: Analyzing milestone achievement to improve community college student outcomes*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.

Purnell, R., & Blank, S. (with Scrivener, S., & Seupersad, R.) (2004). *Support success: Services that may help low-income students succeed in community college*. New York, NY; Oakland, CA: MDRC.

Scrivener, S., & Weiss, M. (2009). *More guidance, better results? Three-year effects of an enhanced student services program at two community colleges*. New York, NY; Oakland, CA: MDRC.

Walters, E. W. (2003). Becoming student centered via the one-stop shop initiative: A case study of Onondaga Community College. *Community College Review*, 31, 40–54. doi:10.1177/009155210303100303

Policy Lever 3 (Providing Curricular Structure, Opportunities, and Focus)

Bailey, T. R., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges*. Indianapolis, IN: Lumina Foundation for Education.

- Calcagno, J. C., Crosta, P., Bailey, T., & Jenkins, D. (2006). *Stepping stones to a degree: The impact of enrollment pathways and milestones on older community college student outcomes*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success (A first look)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Community College Survey of Student Engagement (CCSSE). (2007). *MetLife Foundation best-practice colleges: Building relationships for student success. CCSSE Highlights*, 6(3).
- Edgecombe, N. (2011). *Accelerating the academic achievement of students referred to developmental education*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Gardenhire-Crooks, A., Collado, H., & Ray, B. (2006). *A whole 'nother world: Students navigating community college* (Opening Doors Project Report). New York, NY; Oakland, CA: MDRC.
- Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, 80(3), 437–469. doi: 10.3102/0034654310370163
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention? Two-year public colleges*. Iowa City, IA: ACT.
- Howell, J. S., Kurlaender, M., & Grodsky, E. (2009). *Postsecondary preparation and remediation: Examining the effect of the early assessment program at California State University*. Sacramento, CA: California State University at Sacramento.
- Hughes, K. L., & Scott-Clayton, J. (2010). *Assessing developmental assessment in community colleges: A review of the literature*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Jenkins, D., Bailey, T. R., Crosta, P., Leinbach, T., Marshall, J., Soonachan, A., & Van Noy, M. (2006). *What community college policies and practices are effective in promoting student success? A study of high- and low-impact institutions*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Jenkins, D., Ellwein, T., Wachen, J., Reid Kerrigan, M., & Cho, S. (2009). *Achieving the Dream colleges in Pennsylvania and Washington State: Early progress toward building a culture of evidence*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Liebowitz, M., & Taylor, J. C. (2004). *Breaking through: Helping low-skilled adults enter and succeed in college and careers*. Boston, MA; Columbus, OH: Jobs for the Future and National Council for Workforce Education.
- Matus-Grossman, L., & Gooden, S. (2002). *Students' perspectives on juggling work, family, and college*. New York, NY; Oakland, CA: MDRC.
- Moore, C., Shulock, N., & Offenstien, J. (2009). *Steps to success: Analyzing milestone achievement to improve community college student outcomes*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.
- Pearson Foundation. (2011). *New survey: Community college students shut out of classes*. Retrieved from <http://www.pearsonfoundation.org/pr/20111117-new-survey-community-college-students-shut-out-of-classes.html>
- Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). *Do student success courses actually help community college students succeed?* New York, NY: Community College Research Center, Teachers College, Columbia University.

Bibliography

- Achieving the Dream. (2005). *Achieving the Dream: Community Colleges Count*. Retrieved from <http://www.achievingthedream.org/ABOUTATD/OVERVIEW/default.tp>
- Achieving the Dream, Community Colleges Count. (2010). *Promising practices: Equity 2010 leader colleges*. Retrieved from <http://www.achievingthedream.org/Portal/Modules/5cdc3f0e-8669-4608-9b7c-2c834e623297.asset?>
- Achieving the Dream, Community Colleges Count. (2011). *Promising practices: Equity 2011 leader colleges*. Retrieved from <http://www.achievingthedream.org/Portal/Modules/69734382-a0eb-4f30-9071-d61034a41eb7.asset?>
- Adelman, C. (2007, March 12). Making graduation rates matter. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/views/2007/03/12/adelman>
- Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., Wang, X., and Zhang, J. (2012). *The Condition of Education 2012* (NCES 2012-045). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>.
- Bailey, T. R., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges* (New Agenda Series Vol. 6, No. 1). Indianapolis, IN: Lumina Foundation for Education.
- Bailey, T. R., Leinbach, D. T., & Jenkins, D. (2005). *Is student success labeled institutional failure? Student goals and graduation rates in the accountability debate at community colleges*. New York, NY: Teachers College, Columbia University, Community College Research Center.
- Barnett, E. (2011). Validation experiences and persistence among community college students. *The Review of Higher Education*, 34(2), 193–230.
- Biden, J. (2011). Letter from Dr. Biden. In *The White House Summit on Community Colleges: Summit report*. Washington, DC: The White House, Office of the Press Secretary.
- Boggs, G. (2010). *Democracy's colleges: The evolution of the community college in America*. Washington, DC: American Association of Community Colleges.
- Boswell, K., & Wilson, C. D. (Eds.). (2004, July). *Keeping America's promise: A report on the future of the community college* (A joint report of the Education Commission of the States and the League for Innovation in the Community College). Denver, CO: Education Commission of the States.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure* (ASHE-ERIC Higher Education Report, Vol. 30, No. 3). San Francisco, CA: Jossey-Bass.
- Brock, T., & LeBlanc, A. (2005). *Promoting student success in community college and beyond: The Opening Doors demonstration*. New York, NY; Oakland, CA: MDRC.
- Calcagno, J. C., Crosta, P. M., Bailey, T., & Jenkins, D. (2006, October). *Stepping stones to a degree: The impact of enrollment pathways and milestones on older community college student outcomes*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Clements, E. (2000). Creating a campus climate in which diversity is truly valued. *New Directions for Community Colleges*, 112, 63–72.
- Community College Survey of Student Engagement (CCSSE). (2007). Building relationships for student success. *CCSSE Highlights*, 6(3), 4.
- Community College Survey of Student Engagement (CCSSE). (2008). *High expectations and high support*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Complete College America. (2011). *Time is the enemy: The surprising truth about why today's college students aren't graduating...and what needs to change*. Washington, DC: Author.
- Cook, B., & Pullaro, N. (2010). *College graduation rates: Behind the numbers*. Washington, DC: American Council on Education, Center for Policy Analysis.
- Deil-Amen, R., & Rosenbaum, J. E. (2003). The social prerequisites of success: Can college structure reduce the need for social know-how? *The Annals of the American Academy of Political and Social Science*, 586(1), 120–143.

- Dundar, A., Hossler, D., Shapiro, D., Chen, J., Torres, V., Zerquera, D., & Ziskin, M. (2011, July). *National postsecondary enrollment trends: Before, during, and after the Great Recession* (Signature Report No.1). Herndon, VA: National Student Clearinghouse Research Center.
- Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review*, 36(2), 68–88.
- Gardenhire-Crooks, A., Collado, H., & Ray, B. (2006, July). *A whole 'nother world: Students navigating community college* (Opening Doors Project Report). New York, NY; Oakland, CA: MDRC.
- Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, 80(3), 437–469. doi:10.3102/0034654310370163
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention? Two-year public colleges*. Iowa City, IA: ACT.
- Hendrick, R. Z., Hightower, W. H., & Gregory, D. E. (2006). State funding limitations and community college open door policy: Conflicting priorities? *Community College Journal of Research & Practice*, 30(8), 627–640.
- Hirschy, A. S., Bremer, C. D., & Castellano, M. (2011). Career and technical education (CTE) student success in community colleges: A conceptual model. *Community College Review*, 39(3), 296–318.
- Hossler, D. (1984). *Enrollment management: An integrated approach*. New York, NY: College Entrance Examination Board.
- Hossler, D. (2006). Managing student retention: Is the glass half full, half empty, or simply empty? *College and University*, 81(2), 11–14.
- Hossler, D., Ziskin, M., & Gross, J. P. K. (2009). Getting serious about institutional performance in student retention: Research-based lessons on effective policies and practices. *About Campus*, 13(6), 2–11. doi: 10.1002/abc.271
- Howell, J. S., Kurlaender, M., & Grodsky, E. (2009). *Postsecondary preparation and remediation: Examining the effect of the early assessment program at California State University*. Sacramento, CA: California State University at Sacramento.
- Hughes, K. L., & Scott-Clayton, J. (2010). *Assessing developmental assessment in community colleges: A review of the literature*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Hurtado, S., Griffin, K. A., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education*, 1(4), 204–221.
- JBL Associates Inc. (2010). *The financial aid challenge: Successful practices that address the underutilization of financial aid in community colleges*. New York, NY: The College Board.
- Jenkins, D., Bailey, T. R., Crosta, P., Leinbach, T., Marshall, J., Soonachan, A., & Van Noy, M. (2006). *What community college policies and practices are effective in promoting student success? A study of high- and low-impact institutions*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Jenkins, D., Ellwein, T., Wachen, J., Kerrigan, M. R., & Cho, S. (2009, March). *Achieving the Dream colleges in Pennsylvania and Washington State: Early progress toward building a culture of evidence*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Kemerer, F. R., Baldrige, J. V., & Green, K. C. (1982). *Strategies for effective enrollment management*. Washington, DC: American Association of State Colleges and Universities.
- Kibler, A. K., Bunch, G. C., & Endris, A. K. (2011). Community college practices for U.S.-educated language-minority students: A resource-oriented framework. *Bilingual Research Journal*, 34, 201–222.
- Levin, J. S., Cox, E. M., Cerven, C., & Haberler, Z. (2010). The recipe for promising practices in community colleges. *Community College Review*, 1(1), 31–58.
- Lew, J. W., Chang, J. C., & Wang, W. W. (2005). The overlooked minority: Asian Pacific American students at community colleges. *Community College Review*, 33(2), 64–84.
- Lewin, T. (2011, September 27). College graduation rates are stagnant even as enrollment rises, a study finds. *The New York Times*.
- Liebowitz, M., & Taylor, J. C. (2004). *Breaking through: Helping low-skilled adults enter and succeed in college and careers*. Boston, MA; Columbus, OH: Jobs for the Future and National Council for Workforce Education.

- Malcom, L. E., Bensimon, E. M., & Dávila, B. (2010). *(Re)constructing Hispanic-serving institutions: Moving beyond numbers toward student success* (EP3: Education Policy and Practice Perspectives, No. 6). Iowa State University: Department of Educational Leadership and Policy Studies.
- Matus-Grossman, L., & Gooden, S. (2002). *Students' perspectives on juggling work, family, and college*. New York, NY; Oakland, CA: MDRC.
- Matus-Grossman, L., Gooden, S., Wavelet, M., Diaz, M., & Seupersad, R. (2002, July). *Students' perspectives on juggling work, family, and college* (Opening Doors Project Report). New York, NY: MDRC.
- McArthur, R. C. (2005, spring). Faculty-based advising: An important factor in community college retention. *Community College Review*, 32(4), 1–19.
- McClenney, K. (2004). *Keeping America's promise: Challenges for community colleges* (A joint publication of Education Commission of the States and League for Innovation in the Community College). Denver, CO: Education Commission of the States.
- McClenney, K., & McClenney, B. (2010). *Community college inventory: Focus on student persistence, learning, and attainment*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- McClenney, K. M., McClenney, B. N., & Peterson, G. F. (2007). A culture of evidence: What is it? Do we have one? *Planning for Higher Education*, 35(3), 26–33.
- McConnell, P. J. (2000). ERIC review: What community colleges should do to assist first-generation students. *Community College Review*, 28(3), 75–87.
- Mendoza, P., Mendez, J. P., & Malcolm, Z. (2009). Financial aid and persistence in community colleges: Assessing the effectiveness of federal and state financial aid programs in Oklahoma. *Community College Review*, 37(2), 112–135.
- Moore, C., & Shulock, N. (2010). *Divided we fail: Improving completion and closing racial gaps in California's community colleges*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.
- Moore, C., Shulock, N., & Offenstein, J. (2009). *Steps to success: Analyzing milestone achievement to improve community college student outcomes*. Sacramento, CA: California State University at Sacramento, Institute for Higher Education Leadership & Policy.
- Morest, V., & Jenkins, D. (2007). *Institutional research and the culture of evidence at community colleges*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Mullin, C. M. (2011, October). *The road ahead: A look at trends in the educational attainment of community college students* (Policy Brief 2011-04PBL). Washington, DC: American Association of Community Colleges.
- Mullin, C. M., & Phillippe, K. (2009, December). *Community college enrollment surge: An analysis of estimated fall 2009 headcount enrollments at community colleges*. Washington, DC: American Association of Community Colleges.
- Muston, R. A. (1985). Role ambiguity in institutional marketing and enrollment management. *Research in Higher Education*, 22(4), 371–379. doi:10.1007/BF00974211
- National Association of Student Financial Aid Administrators (NASFAA) (2011). *Findings from the 2010 NASFAA Administrative Burden Survey*. Washington, DC: Author.
- National Center for Public Policy and Higher Education. (2011). *Affordability and transfer: Critical to increasing baccalaureate degree completion*. San Jose, CA: Author.
- Nitecki, E. M. (2011). The power of the program: How the academic program can improve community college student success. *Community College Review*, 39(2), 98–120. doi:10.1177/0091552111404926
- Noel-Levitz. (2007). *Student retention practices at two-year institutions* (2007 National Research Report). Retrieved from www.noellevitz.com/retentionpractices
- Offenstein, J., & Shulock, N. (2009). *Community college student outcomes: Limitations of the Integrated Postsecondary Education Data System (IPEDS) and recommendations for improvement*. Sacramento, CA: Institution for Higher Education Leadership & Policy.
- Orozco, V., & Mayo, L. (2011). *Keeping students enrolled: How community colleges are boosting financial resources for their students*. New York, NY: Demos.
- Overland, W. I., & Rentz, A. L. (2004). Orientation. In F. J. D. MacKinnon & Associates (Eds.), *Rentz's student affairs practice in higher education* (3rd ed., pp. 239–267). Springfield, IL: Charles C. Thomas.

- Pearson Foundation. (2011). *New survey: Community college students shut out of classes*. Retrieved from <http://www.pearsonfoundation.org/pr/20111117-new-survey-community-college-students-shut-out-of-classes.html>
- Price, D. B., Hyle, A. E., & Jordan, K. V. (2009). Ties that blind: Perpetuation of racial comfort and discomfort at a community college. *Community College Review*, 37(1), 3–33.
- Purnell, R., & Blank, S. (with Scrivener, S., & Seupersad, R.) (2004). *Support success: Services that may help low-income students succeed in community college*. New York, NY; Oakland, CA: MDRC.
- Santiago, D. A. (2010). *Reality check: Hispanic-serving institutions on the Texas border strategizing financial aid*. Washington, DC: Excelencia in Education.
- Schuetz, P. (2005). Campus environment: A missing link in studies of community college attrition. *Community College Review*, 32(4), 60–80.
- Scrivener, S., & Weiss, M. (2009, August). *More guidance, better results? Three-year effects of an enhanced student services program at two community colleges*. New York, NY; Oakland, CA: MDRC.
- Stovall, M. (2000, winter). Using success courses for promoting persistence and completion. *New Directions for Community Colleges*, 2000(112), 45–54.
- Summers, M. D. (2003). ERIC review: Attrition research at community colleges. *Community College Review*, 30(4), 64–84.
- Szeleyni, K., & Chang, J. C. (2002). Educating immigrants: The community college role. *Community College Review*, 30(2), 55–73.
- Walters, E. W. (2003). Becoming student centered via the one-stop shop initiative: A case study of Onondaga Community College. *Community College Review*, 31, 40–54. doi:10.1177/009155210303100303
- Wellman, J. V., Desrochers, D. M., Lenihan, C. M., Kirshstein, R. J., Hurlburt, S., & Honegger, S. (2009). *Trends in college spending: Where does the money come from? Where does it go?* Washington, DC: Delta Project on Postsecondary Education Costs, Productivity and Accountability. Retrieved from http://www.deltacostproject.org/resources/pdf/trends_in_spending-report.pdf
- White House, The. (2011). *The White House summit on community colleges: Summit report*. Washington, DC: The White House, Office of the Press Secretary.
- Williams, D. A., Berger, J. B., & McClendon, S. A. (2005). *Toward a model of inclusive excellence and change in postsecondary institutions*. Washington, DC: Association of American Colleges and Universities.
- Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). *Do student success courses actually help community college students succeed?* New York, NY: Community College Research Center, Teachers College, Columbia University.
- Zhang, Y. L. (2011). Education abroad in the U.S. community colleges. *Community College Review*, 39(2), 181–200.
- Ziskin, M., Hossler, D., & Kim, S. (2009). The study of institutional practices related to student persistence. *Journal of College Student Retention: Research, Theory, & Practice*, 11(1), 101–121.
- Ziskin, M., Torres, V., Hossler, D., & Gross, J. P. K. (2010). Mobile working students: A delicate balance of college, family, and work. In L. W. Perna (Ed.), *Understanding the working college student: New research and its implications for policy and practice* (pp. 67–92). Sterling, VA: Stylus.

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